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**EMPLOYMENT SURVEY OF 1979 GRADUATES
OF ONTARIO UNIVERSITIES**

**MAJOR FINDINGS
&
STUDY METHODOLOGY**

EMPLOYMENT SURVEY OF 1979 GRADUATES
OF ONTARIO UNIVERSITIES

MAJOR FINDINGS & STUDY METHODOLOGY

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PREPARED BY:

THOMPSON LIGHTSTONE & COMPANY LIMITED

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1.0 INTRODUCTION

In September, 1979 the Ministry of Colleges & Universities commissioned Thompson Lightstone & Company Limited to undertake a survey of 1979 Spring graduates from the fifteen Ontario universities, Ryerson Polytechnical Institute and the Ontario College of Art. The major objective of the survey was,

"to obtain data on the employment status of 1979 university graduates within a year after graduation and the relationship between that status and their post-secondary educational experience".

To collect the required information, a questionnaire was mailed to all 1979 Spring graduates from the 17 institutions. Before the mailing, the questionnaire was pre-tested with a small sample of 500 graduates from Queen's University, Guelph University, Waterloo University, the University of Western Ontario, Wilfrid Laurier University, McMaster University, and the University of Toronto. In addition, 10 personal interviews were conducted with graduates in Toronto to discuss the content and structure of a draft copy of the questionnaire after the respondents had completed the survey.

A copy of the questionnaire was mailed to all graduates during late February and early March. Two weeks later a reminder card was mailed

urging the graduates to complete and return the questionnaire as soon as possible. Approximately two weeks later, a second copy of the questionnaire was mailed to all graduates from whom a completed questionnaire still had not been received.

The questionnaire covered eight major areas:

- *Details of the degree programme recently graduated from.*
- *Present student status.*
- *Present employment status.*
- *If employed since graduation, utilization of various sources in the job search.*
- *Details of the first job following graduation.*
- *Details of the current job (if different from the first job).*
- *Relationship of current job to field of study.*
- *Miscellaneous areas such as participation in extra curricular activities at university, employment prior to graduation, sex and age.*

By June 30, 1980 a total of 21,813 questionnaires had been received.

Of these, 1,705 either arrived too late to be coded and included in the data base or contained too many problems (questions missed or answered incorrectly) to be considered legitimate returns. The remaining 20,108 questionnaires were coded, keypunched, and transferred

to a master tape file. This represents an effective return rate of 56.7% based on the original mailing population of 35,446. This is slightly less than the target of 60%; however, if the universe is reduced by the number of questionnaires which were returned as "not at that address" or "no such address", the rate of return would be slightly greater than 60%.

A series of tests were written to check each questionnaire for logical consistency and that the response to any question matched the range of valid codes. The data base was processed against these tests until all of the questionnaires passed all of the tests.

To offset any bias in the returns, the data was weighted by university and level of qualification to match the distribution of the original mailing population. In total, the questionnaire contained 120 separate data elements (excluding multiple mentions for open-ended questions). Only a small sub-set of the data elements was selected for the primary analysis.

Some of the highlights of the analysis indicate that, of the 1979 Spring graduates from the Ontario universities,

- *25.6% are enrolled either full-time in a continuing education program or in a program leading to professional certification.*
- *1.8% are presently not employed and not seeking employment.*

- 2.8% are employed, or have been employed, and are now resident outside Canada.
- the remaining 69.7% are part of the labour force. Of these, 86.6% are either employed on a full-time basis, or awaiting the start of a job or recall to a previous job; 8.5% are employed on a part-time basis. The remaining 4.9% are classified as unemployed.
- a slightly higher percentage of females entered the labour force than males. Employment rates were almost identical (95.3% for males compared with 94.8% for females).
- graduates from co-op programmes were more likely to enter the labour force and showed higher employment rates (98.5% compared with 94.9% for graduates from regular programs).
- students who have previous full-time employment experience were also more likely to enter the labour force, as expected.
- on average, there was a period of 2.49 months between completion of degree requirements and first employment. Females took approximately two weeks longer than males before starting employment.
- only 25% of all master's level graduates who are currently employed on a full-time basis reported that a master's level degree was a requirement for employment. As a proxy measure for over, or under, utilization of highly qualified manpower, this result would indicate that master's, and not PhD, level degree graduates are the most under-utilized resource.

- 70.1% of all graduates are still in the province of Ontario; 80.1% are still in Canada. The location of 17.1% of the graduates could not be determined because of insufficient data. The United States accounts for 1.1% of the graduates; the remaining 1.6% have emigrated to other parts of the world.
- 22.5% of all PhD graduates are no longer resident in Canada. The largest proportion (12.9%) have gone to the United States, a trend which has drawn a lot of attention over the past years and appears to be continuing.
- higher starting and current salaries are achieved by graduates from the traditional fields of study such as engineering, health, and commerce and finance. A ranking can be established based on the 50 percent point (i.e. the minimum starting level which would cover at least 50% of all graduates in engineering would be \$18,000, while in fine and applied arts the corresponding data point would be \$10,000).
- males have both higher starting and current salaries than females. However, females have a much lower proportion of graduates from fields of study such as engineering and commerce which have the higher salaries. For example, 21.9% of males graduated from engineering while only 2.3% of females graduated from this field of study. Further investigations of the data base will be required to determine whether salary differences which presently exist between males and females can be explained by field of study or level of qualification.
- graduates from the health programs rated the highest relationship between education and job with a score of 1.13, followed by education and engineering graduates at 1.55. (The score is based on a scale of 1.0 for "very related" to 4.0 for "not at all related"). The average score was 1.88.
- almost 70% of all graduates who are presently employed full-time are "satisfied" with their present salary level (69.1%). Slightly fewer (64.6%) are satisfied with the opportunity for advancement while 75.7% indicated satisfaction with the opportunity for personal initiative.

These are just a few of the results from the analysis of the data collected during this survey. These summary points and other major findings are discussed in more detail in the following section.

The major findings, study methodology, primary tabulations and details of the data file structure are contained in a series of 5 volumes. The contents of each volume are listed below:

<u>VOLUME</u>	<u>TITLE/CONTENTS</u>
<i>I</i>	<i>Major Findings and Study Methodology</i>
<i>II</i>	<i>Tabulations and Means</i>
<i>III</i>	<i>Raw Frequencies</i>
<i>IV</i>	<i>File Layout * Code Book * Logic Tables</i>
<i>V</i>	<i>Summary Returns by University and Program</i>

The remainder of this report is devoted to a presentation of the major findings and study methodology. Also contained in the Appendices are copies of the mailing and project control materials used during the survey.

2.0 MAJOR FINDINGS

Completed questionnaires were received from a total of 20,108 graduates. Of these 92% indicated that they completed the requirements for their most recent degree or diploma in 1979. The remaining graduates specified years ranging from 1946 through to 1980. A small proportion of the sample (0.1%) did not state the year of completion. To have been very rigid in accepting only those graduates who recorded the "year of completion" as 1979 would have reduced the sample to 18,516 respondents (92.1%). Therefore "completion of degree requirements" was not used as a screening or validation factor.

In addition to recording the year and month when the graduate completed the requirements for the most recent degree or diploma, the convocation date was also asked. In this case the number of respondents replying with the year "1979" increases to 19,445 (96.7%). Again, there is a wide range of responses for the remaining graduates (1959 through to 1981). Slightly more than 1% of the sample either did not know their year of convocation or did not state an answer. After reviewing the frequencies, it was decided to include for analysis all graduates who indicated either a year of convocation as 1979 or did not state a response. Therefore, the final sample size for analysis was a population of 19,648 graduates.

Several analyses were selected for processing from this sample of 1979 graduates. These analyses can be grouped into the following major areas:

- *present employment status and related factors*
- *migration patterns*
- *starting and current salary data*
- *Occupation and SIC classification of current occupation*
- *relationship of most recent job to education*
- *level of satisfaction with present salary, opportunity for advancement, and opportunity for personal initiative*

The major findings in each of these areas are discussed in the following sections.

2.1 Present Employment Status

The labour force is generally defined to include those who are,

- *employed full-time*
- *awaiting the start of a job or recall to previous employment*
- *employed part-time*
- *not employed but seeking employment*

Using this definition, 69.7% of all 1979 Spring graduates would be considered a part of the Canadian labour force. Of the remaining 30.3%, 2.8% either are presently resident outside Canada, and therefore would not form part of the labour statistics, or did not provide sufficient information on their questionnaire to enable a determination of employment status to be made. This latter category accounts for less than 0.05%, the remaining 2.8% representing those graduates now resident outside of Canada. Approximately 1.8% of all graduates are not employed and are not seeking employment. The remaining 25.6% are currently enrolled as full-time students including professional certification programs (e.g. articling, medical internship).

In order not to distort the statistics on full-time employment, it was decided that all graduates from the L.L.B. and L.L.L. programs would be considered in the professional certification category.

When analyzed by field of study some interesting differences in employment status are evident although many follow patterns which might be expected from the nature of the degree program. For example, the proportion of graduates entering the labour force is highest in those fields of study more closely related to specific occupations in industry or government. In support of this statement, it can be noted that the fields of study showing the greatest proportion of graduates entering the labour force are highest in Education (86.1%), Engineering and Applied Science (81.7%) and Commerce and Business Administration (72.7%).

As might be expected, those fields of study with high labour force participation rates show the lowest rates in terms of students continuing their education. Those fields of study showing the highest rates for graduates continuing their education include Arts and Science (no major) at 35.3%, and Agriculture and Biological Sciences and the Humanities (31.6% each).

These statistics are presented in Table 1. In addition, the results in Table 1 show the total labour force distributed by those presently employed and those classified as unemployed. Overall, the unemployment rate is low (4.9%) in comparison with present national rates. However, the unemployment rate varies considerably from a low of 2.1% in the Health Professions to a high of 9.1% in Arts and Science with no designated major. In general the arts and social science disciplines show the highest rates of unemployment; the sciences and professions the lowest.

(Reference: Table 1)

TABLE 1

EMPLOYMENT STATUS BY FIELD OF STUDY*

FIELD OF STUDY	TOTAL	EMPLOYMENT STATUS					
		STUDENT & PROF. CERT	NOT EMPLOYED & NOT SEEKING	RES. OUTSIDE CANADA/ NOT STATED	TOTAL LABOUR FORCE	LABOUR FORCE	
						EMPLOYED	UNEMPLOYED
TOTAL RESPONDENTS (100%)	19649	5033	362	556	13697	13024	673
EDUCATION /PHE / REC/LEISURE	16.4%	11.6%	1.2%	1.1%	36.1%	95.9%	4.1%
FINE & APPLIED ARTS	2.9	23.4	4.2	3.9	68.5	91.7	8.3
HUMANITIES & RELATED	13.9	31.6	3.7	2.6	62.0	93.9	6.0
SOCIAL SCIENCE & RELATED	23.2	28.3	2.6	2.7	66.3	93.1	6.9
COMMERCE & BUSINESS ADMINISTRATION	10.2	23.8	0.7	2.8	72.7	96.7	3.3
AGRICULTURE & BIOLOGICAL SCIENCE	7.9	31.6	1.6	2.8	64.1	92.3	7.7

* numbers may not total exactly because of weighting;
percents may not sum to 100.0 because of rounding.

continued ...

TABLE 1 (CONT'D)
EMPLOYMENT STATUS BY FIELD OF STUDY*

FIELD OF STUDY	TOTAL	EMPLOYMENT STATUS					
		STUDENT & PROF. CERT	NOT EMPLOYED & NOT SEEKING	RES. OUTSIDE CANADA/ NOT STATED	TOTAL LABOUR FORCE	LABOUR FORCE	
						EMPLOYED	UNEMPLOYED
TOTAL RESPONDENTS (100%)	19649	5033	362	556	13697	13024	673
ENGINEERING & APPLIED SCIENCE	9.8%	12.4%	0.5%	5.5%	81.7%	97.6%	2.4%
HEALTH PROFESSIONS	5.9	27.3	0.7	2.5	69.5	97.9	2.1
MATH & PHYSICAL SCIENCES	6.4	25.2	1.0	4.8	69.0	97.0	3.0
L.L.B. & L.L.L.	2.3	99.7	0.0	0.3	0.0	0.0	0.0
ARTS & SCIENCE (no major), OTHER & NOT STATED	1.3	35.3	4.6	2.2	58.0	90.9	9.1
TOTAL	100.0%	25.6%	1.8%	2.8%	69.7%	95.1%	4.9%

* numbers may not total exactly because of weighting;
percents may not sum to 100.0 because of rounding.

Statistics on labour force participation rates by level of qualification and sex are presented in Table 2 and Table 3 respectively. Most of the results shown for the analysis by level of qualification could be anticipated following the presentation of employment status by field of study.

Of particular interest, are the results shown for the PhD level of qualification. There has been considerable interest shown over the past years on the lack of opportunities for such highly qualified graduates. The preliminary results of the survey indicate that the unemployment rate for those PhD graduates who would be considered part of the labour force is not significantly higher than any of the other levels of qualification. In fact, the rate is lower than the survey average (3.0% vs 4.9%). What is particularly noteworthy is the proportion of PhD's who are no longer resident in Canada. The data in Table 2 shows that 21.5% of all PhD graduates are no longer resident in Canada. This rate is greater than that shown by any other level of qualification.

Another comparison which has drawn considerable interest is the difference between males and females in terms of labour participation rates. The data in Table 3 shows that there is very little difference. The only variation is evident in the category "not employed and not seeking" where the rate for females is twice that for males (2.6% vs. 1.1%).

(Reference: Tables 2 & 3)

TABLE 2

EMPLOYMENT STATUS BY LEVEL OF QUALIFICATION*

LEVEL OF QUALIFICATION	TOTAL	EMPLOYMENT STATUS					
		STUDENT & PROF. CERT	NOT EMPLOYED & NOT SEEKING	RES. OUTSIDE CANADA/ NOT STATED	TOTAL LABOUR FORCE	LABOUR FORCE	
TOTAL RESPONDENTS (100%)	19649	5033	362	556	13697	EMPLOYED	UNEMPLOYED
BACHELOR'S	76.0%	25.6%	2.1%	2.5%	69.8%	94.5%	5.5%
1ST PROFESSIONAL	5.3	66.8	0.0	1.2	32.0	99.1	0.9
MASTER'S	10.0	12.3	1.4	5.2	81.0	97.4	2.6
PhD	1.2	3.9	0.4	21.5	74.3	97.0	3.0
DIPLOMA, CERTIFICATE, & OTHER	7.6	18.3	0.9	1.1	79.7	95.5	4.5
TOTAL	100.0%	25.6%	1.8	2.8	69.7	95.1	4.9

* numbers may not total exactly because of weighting;
percents may not sum to 100.0 because of rounding.

TABLE 3
EMPLOYMENT STATUS BY SEX*

SEX	TOTAL	EMPLOYMENT STATUS					
		STUDENT & PROF. CERT	NOT EMPLOYED & NOT SEEKING	RES. OUTSIDE CANADA/ NOT STATED	TOTAL LABOUR FORCE	LABOUR FORCE	
						EMPLOYED	UNEMPLOYED
TOTAL RESPONDENTS (100%)	19649	5033	362	556	13697	13024	673
MALE	51.0%	26.7%	1.1%	3.2%	69.1%	95.3%	4.7%
FEMALE	48.3	24.7	2.6	2.4	70.3	94.8	5.2
NOT STATED	0.7	9.8	4.3	2.6	75.6	97.1	2.9
TOTAL	100.0%	25.6%	1.8%	2.8%	69.7%	95.1%	4.9%

* numbers may not total exactly because of weighting;
percents may not sum to 100.0 because of rounding.

The influence of several other factors on labour participation rates were also investigated:

- *whether enrolled in a regular or co-op program.*
- *previous employment experience.*
- *participation in extra curricular activities during university.*

Analyses of these three variables are presented in Tables 4 to 6. A total of 3.8% of the sample of 1979 graduates had been enrolled in a co-op program. As might be expected they showed a higher labour force participation rate than those students who were enrolled in regular degree program (82.2% vs 69.2%). As noted before, high labour force participation rates are mirrored by correspondingly lower rates for continuing education. The data in Table 4 shows this to be true for the analysis of regular and co-op programs. The proportion of students not employed and not seeking is much lower for students graduating from a co-op program (0.4%) than from a regular degree program (1.9%).

(Reference: Table 4)

TABLE 4

EMPLOYMENT STATUS BY PROGRAM TYPE*

PROGRAM TYPE	TOTAL	EMPLOYMENT STATUS					
		STUDENT & PROF. CERT	NOT EMPLOYED & NOT SEEKING	RES. OUTSIDE CANADA/ NOT STATED	TOTAL LABOUR FORCE	LABOUR FORCE	
						EMPLOYED	UNEMPLOYED
TOTAL RESPONDENTS (100%)	19649	5033	362	556	13697	13024	673
REGULAR	95.3%	26.0%	1.9%	2.9%	69.2%	94.9%	5.1%
CO-OP	3.8	15.6	0.4	1.7	82.2	98.5	1.5
DO NOT KNOW/ NOT STATED/ REFUSED	0.9	30.0	0.6	1.6	67.7	96.7	3.3
TOTAL	100.0%	25.6%	1.8%	2.8%	69.7	95.1%	4.9%

* numbers may not total exactly because of weighting;
percents may not sum to 100.0 because of rounding.

Almost 82 percent of all graduates had previous summer work experience. An analysis of employment status by previous work experience is presented in Table 5. Only 4.9% of the total sample did not have any work experience prior to graduation and, while the evidence is not conclusive, it appears not to have affected their employment prospects. The labour force participation rate of this group was the lowest at 61.3%. Of those who were considered part of the labour force, 4.6% were classified as unemployed, slightly less than the survey average. Correspondingly, this group showed a higher proportion who were classified as not employed and not seeking. Obviously, there could be a direct cause and effect between "not employed and not seeking" and the fact that the respondent either did not seek employment or was not employed at any time prior to graduation.

Other than the category "no previous work experience prior to graduation", all other previous employment categories showed very similar results. As might be expected, those students with previous full-time work experience recorded the highest labour participation rate (81.1%). However, within the labour force category, there was very little distinction in employment rates between types of previous work experience. Results for summer and part-time experience are almost identical.

(Reference: Table 5)

TABLE 5

EMPLOYMENT STATUS BY PREVIOUS WORK EXPERIENCE*

PREVIOUS WORK EXPERIENCE	TOTAL	EMPLOYMENT STATUS					
		STUDENT & PROF. CERT	NOT EMPLOYED & NOT SEEKING	RES. OUTSIDE CANADA/ NOT STATED	TOTAL LABOUR FORCE	LABOUR FORCE	
TOTAL RESPONDENTS (100%)	19649	5033	362	556	13697	EMPLOYED	UNEMPLOYED
SUMMER	81.6%	27.3%	1.5%	2.3%	68.9%	95.0%	5.0%
PART-TIME	50.1	26.5	1.5	2.4	69.6	94.9	5.1
FULL-TIME	51.4	13.7	1.8	3.3	81.1	94.4	4.6
CO-OP/INTERNSHIP	13.5	25.4	0.5	2.1	72.0	96.9	3.1
NO EXPERIENCE	4.9	26.4	5.7	6.6	61.3	95.4	4.6
TOTAL	**	25.6%	1.8	2.8	69.7	95.1	4.9

* numbers may not total exactly because of weighting;
percents may not sum to 100.0 because of rounding.

** multiple mentions possible.

During the discussions related to the structure and content of the questionnaire, the university representatives indicated an interest in investigating whether or not a graduate's participation in university organizations affected their success in obtaining employment. The labour participation rates for those graduates who indicated either a leadership role or participatory role in university organizations are considerably lower than the rate shown for those people who neither participated nor assumed a leadership role.

The opposite effect is reflected in the category "enrolled in a continuing education program or a program leading to professional certification". The rate for those people who did participate in university organizations is higher than for those people who did not. In other words, those graduates who take an active interest in university organizations are more likely to continue their education than those people who did not participate.

Within the labour force, graduates who did not participate in university organizations show a comparable employment rate with those who did participate. However, the difference is marginal. In conclusion, it appears that the effect of participation in university organizations is reflected more in whether or not a student enters the labour force rather than whether they are employed or unemployed.

(Reference: Table 6)

TABLE 6
EMPLOYMENT STATUS BY PARTICIPATION
IN UNIVERSITY ORGANIZATIONS*

FIELD OF STUDY	TOTAL	EMPLOYMENT STATUS					
		STUDENT & PROF. CERT	NOT EMPLOYED & NOT SEEKING	RES. OUTSIDE CANADA/ NOT STATED	TOTAL LABOUR FORCE	LABOUR FORCE	
						EMPLOYED	UNEMPLOYED
TOTAL RESPONDENTS (100%)	19649	5033	230	1173	13212	13024	188
LEADERSHIP ROLE	21.8%	27.2%	1.2%	3.0%	68.5%	95.9%	4.1%
PARTICIPANT	52.8	27.5	1.5	3.0	67.9	94.8	5.2
DID NOT PARTICIPATE	24.3	21.8	2.6	2.3	73.4	94.8	5.2
REFUSED/NOT STATED	3.3	19.1	5.2	2.6	72.9	96.4	3.4
TOTAL	**	25.6%	1.8%	2.8%	69.7%	95.1%	4.9%

* numbers may not total exactly because of weighting;
percents may not sum to 100.0 because of rounding.
** multiple mentions possible.

2.2 Job Search Factors

The ability of a university graduate to find suitable employment is based on many factors. Two of the objectives of this survey were to investigate the dynamics of how graduates look for employment and to measure the success which graduates have been able to achieve. Two areas which were explored in the primary analysis were the length of time from graduation to first employment and the relationship between level of qualification at graduation and the degree level specified for employment.

The calculation of "length of time to first employment" was based upon the difference between the year and month when the first job started and the year and month the degree requirements were completed. Several assumptions are required to define this variable. If the year and month of completing the degree requirements was after the "start" of the first employment, it was considered that the graduate had been employed before graduation. As shown in Table 7, 15.8% of all graduates who are currently employed full-time were actually employed before the date of completing their degree requirements. This rate varied by field of study. The highest rate was recorded by those graduates enrolled in Arts & Science with no stated major field of study (26.7%). The lowest rate was in the Health Professions (5.4%)

When interpreting these results, it is important to recognize that the date of first employment is not the date at which the job was accepted but rather the date on which the graduate began work. Any time which the graduate took off between completing the degree requirements and actually starting work would be classified as "looking for employment" in Table 7.

In an attempt to make the interpretation of the data easier, the percents in Table 7 are shown as cumulative. For example, 15.8% of all graduates were employed before graduation; 37.8% started working within one month after graduation (this 37.8% includes the 15.8% who were in fact employed before graduation). Taking the analysis one step further, 72.1% of all graduates who are currently employed on a full-time basis, started working within three months after graduation. The complimentary conclusion would be that after three months, 27.9% of all graduates (who were later to be employed on a full-time basis) still had not started their first job.

Some of the areas which might be expected to show very short time spans between graduation and employment in fact took longer. For example, the data from Table 7 would seem to indicate that more than 70% of graduates from Engineering and Applied Science took more than one month to find their first employment. However, within two more months, the proportion had decreased to the lowest of any field of study, only 16.4% having not started employment three months after

graduation. What is not shown in Table 7 is whether or not some of these rates show voluntary exclusion from the labour force for reasons such as travel or recreation. The health professions show a similarly high "not employed" rate during the first month decreasing within the next two months to a rate better than average.

Another field of study to note is Education, Physical and Health Education, and Recreational and Leisure programs. The proportion of graduates employed full-time, three months after graduation, appears extremely low at 52.9%, well below the average (72.1%). However, within the following three months the trend is reversed and the number employed six months following completion of their degree requirements is above the overall average (92.6% vs 91.3%). The reason is probably due to the fact that graduates from education did not commence employment until September, four months after completion of degree requirements. This point serves to illustrate that care should be exercised in interpreting the results from Table 7.

For those graduates who eventually found full-time employment, the average length of time between completion of degree requirements and starting first employment was 2.49 months. This average varied by field of study from a low of 1.91 months for graduates from Arts & Science with no reported major to a high of 3.25 months for those graduates from Education and Physical and Health Education programs (noting the previous comment regarding this field).

(Reference: Table 7)

TABLE 7

LENGTH OF TIME TO FIRST EMPLOYMENT BY FIELD OF STUDY**
(FULL-TIME EMPLOYED)

LENGTH OF TIME TO FIRST EMPLOYMENT **	TOTAL	FIELD OF STUDY									A. & S. (NO MAJOR) & N/S
		EDUC. PHE/ REC/ LEIS.	FINE & APP. ARTS	HUMAN. & REL.	SOCIAL SCI.	COMM. & BUS.	AGRIC. & BIOL. SCI.	ENG. & APP. SCI.	HEALTH PROF.	MATH & PHYS. SCI.	
TOTAL RESPONDENTS (100%)	11626	2169	257	1379	2483	373	817	1486	741	804	117
EMPLOYED BEFORE GRADUATION	15.8%	16.8%	16.0%	22.4%	23.0%	16.6%	8.2%	6.7%	5.4%	10.0%	26.7%
LESS THAN ONE MONTH	37.8	35.7	32.8	43.1	45.9	38.9	36.4	28.2	25.8	36.8	50.5
LESS THAN 3 MONTHS	72.1	52.9	74.0	71.5	71.9	76.5	79.8	83.6	79.2	80.8	78.3
LESS THAN 6 MONTHS	91.3	92.6	90.8	89.7	86.8	92.3	91.0	94.8	95.4	91.7	94.8
LESS THAN 9 MONTHS	95.6	96.7	94.2	94.8	92.7	96.1	94.9	97.2	98.5	97.0	95.7
LESS THAN 12 MONTHS	97.2	97.4	96.0	96.7	95.8	97.1	97.4	98.1	98.8	98.1	95.7
MORE THAN 12 MONTHS	97.6	97.9	96.8	97.1	96.1	97.7	97.9	98.6	98.8	98.2	95.7
NOT DEFINED	100.0	99.9	99.9	99.9	99.8	100.0	100.0	100.0	100.0	100.0	100.0
TOTAL	100.0%	18.7%	2.2%	11.9%	21.4%	11.8%	7.0%	12.8%	6.4%	6.9%	1.0%
MEANS (months)	2.49	3.25	2.69	2.71	2.71	2.27	2.03	1.93	2.04	2.04	1.91

* numbers may not total exactly because of weighting;
 ** percents may not sum to 100.0 because of rounding
 *** shown as cumulative data.
 *** excluding "employed before graduation"

The length of time to first employment was also analysed by sex. As indicated previously, the average length of time between completion of degree requirements and the start of the first employment was 2.49 months. Males began their employment approximately two weeks before female graduates (2.25 months vs 2.79 months). After one month, only 34.7% of females had started their first employment compared with 39.9% of males (Table 8). As in the previous table, the percents shown are cumulative in an effort to give a better indication of the trend and relative statistics.

(Reference: Table 8)

Another factor of university education which has drawn considerable public attention is the possible under-utilization of highly qualified manpower. From the data collected in this survey, an analysis was made of the relationship between the degree level specified for employment and the level of qualification of the graduate. The results of this analysis for all graduates who are currently employed full-time are presented in Table 9. A total of 39.2% of all graduates who are presently employed full-time indicated that no degree was specified for their present employment.

This rate was highest among those graduates from a diploma or certificate level (41.3%) followed closely by those from the baccalaureate level (40.7%). As might be expected, the lowest rate was recorded by graduates from a first professional degree (5.6%).

TABLE 8
LENGTH OF TIME TO FIRST
EMPLOYMENT BY SEX*

LENGTH OF TIME TO FIRST EMPLOYMENT**	TOTAL	SEX		
		MALE	FEMALE	NOT STATED
TOTAL RESPONDENTS (100%)	11626	6169	5365	92
EMPLOYED BEFORE GRADUATION		15.7%	15.9%	13.0%
LESS THAN ONE MONTH		39.9	34.7	75.8
UP TO 3 MONTHS	72.0	76.6	66.7	86.3
UP TO 6 MONTHS	91.2	92.2	90.2	95.6
UP TO 9 MONTHS	95.5	96.0	95.1	97.8
UP TO 12 MONTHS	97.1	97.5	96.8	97.8
MORE THAN 12 MONTHS	97.5	97.9	97.3	97.8
NOT DEFINED	100.0	100.1	100.0	100.0
TOTAL	100.0%	53.1%	46.1%	0.8%
MEAN (MONTHS) ***	2.49	2.25	2.79	1.05

* numbers may not total exactly because of weighting;
percents may not sum to 100.0 because of rounding.

** shown as cumulative data.

*** excluding "employed before graduation"

In order to address the question of under-utilization (or under-employment) of university graduates, it is necessary to focus on the 25 central elements of Table 9, and in particular the diagonal of that sub-matrix. This area is highlighted in Table 9. The higher the percentage shown on the diagonal, the more effective the utilization of the highly qualified manpower. Rates shown in the triangular area above the diagonal represent under-utilization of manpower.

From the results shown in Table 9, it is apparent that the most under-utilized manpower resources are those graduates receiving a Master's level degree. Traditionally, the focus has been on the under-utilization of the PhD recipients. However, only 25% of all graduates receiving a Masters degree reported that this degree level was a requirement for employment. Another 17.7% either did not state the degree level required for employment or did not state whether or not a degree was required. A small proportion (0.1%) reported that a PhD level degree was required for the job. The remaining 57.2% either reported a degree level less than a Masters or indicated that no degree was required for their particular employment. This figure is considerably higher than for any other level of qualification.

As indicated previously, considerable attention has been focused on whether or not PhD graduates are under-utilized. The results of this survey would appear to indicate that graduates with a PhD degree are no more under-utilized than any other degree level, and that, in fact, they are more effectively utilized than graduates at the diploma, certificate, baccalaureate or master's degree levels.

(Reference: Table 9)

TABLE 9

DEGREE SPECIFIED FOR EMPLOYMENT
BY LEVEL OF QUALIFICATION*

(FULL-TIME EMPLOYED)

DEGREE SPECIFIED	TOTAL	LEVEL OF QUALIFICATION				
		DIPLOMA/ CERTIFICATE	BACHELOR	1ST PROFESSIONAL	MASTER'S	PhD
TOTAL RESPONDENTS (100%)	11626	1056	8645	316	1458	151
NONE	39.2%	41.3%	40.7%	5.6%	38.7%	16.9%
DIPLOMA/CERTIFICATE	4.2	35.3	1.3	0.0	0.3	0.0
B.A.	31.0	5.7	37.7	1.3	18.1	7.1
1ST PROFESSIONAL	1.5	0.4	0.1	51.4	0.1	0.0
MASTER'S	4.0	0.4	0.4	15.0	25.0	8.1
PhD	0.6	0.1	**	0.3	0.1	46.3
DEGREE NOT STATED	16.7	15.1	17.2	18.9	13.9	17.8
NOT STATED	2.8	1.6	2.6	7.4	3.8	3.8
TOTAL	100.0%	9.1%	74.4%	2.7%	12.5%	1.3%

* numbers may not total exactly because of weighting;
percents may not sum to 100.0 because of rounding
** less than 0.05%

2.3 Migration Patterns

The present location of 1979 graduates was determined from information supplied on "starting" and "current" occupations. If a graduate has never been employed since convocation, then the present location could not be determined and the respondent was classified into the category "never employed". In other cases, insufficient information was given to determine the present location of the graduate. In these cases the data is reported as "Not Stated". Migration patterns of the 1979 Spring graduates are reported by field of study in Table 10 and by level of qualification in Table 11.

A total of 17.1% of the graduates either had never been employed or provided insufficient information to determine present location. Of the remaining graduates, 80.1% are still resident in Canada; 70.1% are still resident in the province of Ontario. The United States accounts for the next largest proportion but at a very small level (1.1%). Africa accounts for 0.7%, Europe for 0.4%, and Asia for 0.2%.

The highest proportion of graduates remaining in Ontario is recorded in Commerce and Business Administration where the level reaches 79.7%. The next highest is in Education and Physical and Health Education categories at 77.6%. Lowest levels are in the Arts and Science (no major) at 59.0% and the Humanities and related programs at 62.4%.

The highest migration levels to other provinces are reported by graduates from Engineering and Applied Science moving to Alberta - a significant movement at 8.4%. The next largest migration is recorded by the Mathematics and Physical Science graduates at 5.4% (also to Alberta).

(Reference: Table 10)

The significant migration of PhD graduates to the U.S.A. and other countries has already been noted (12.9% to the U.S.A. and 9.5% to other countries). No other degree level shows such a significant migration outside Canada. The PhD graduates also showed the highest migration patterns within Canada. Both Quebec and the Prairies draw almost equal proportions at 6.4% and 6.8% respectively. In other words, as the information in Table 11 demonstrates, it is possible that only 50% of all PhD graduates remain in Ontario following completion of their degree. The highest incidence of graduates remaining in Ontario is recorded by Diploma and Certificate programs (77.3%).

(Reference: Table 11)

TABLE 10

MIGRATION PATTERNS BY FIELD OF STUDY*

PRESENT LOCATION	TOTAL	FIELD OF STUDY									L.L.B. & L.L.L.	A.E.S. (NO MAJOR) & N/S
		EDUC. PHE/ REC LEIS.	FINE & APP. ARTS	HUMAN & REL.	SOCIAL SCI.	COMM. & BUS.	AGRIC. & BIOL. SCI.	ENG. & APP. SCI.	HEALTH PROF.	MATH & PHYS. SCI.		
TOTAL RESP. (100%)	19649	3218	561	2739	4563	1999	1545	1917	1151	1255	451	247
NEWFOUNDLAND	0.3%	0.4%	0.4%	0.1%	0.1%	0.3%	0.0%	0.2%	1.2%	0.2%	0.8%	0.4%
P.E.I.	0.5	0.4	0.0	0.6	0.3	0.2	0.9	0.5	1.8	0.3	0.2	0.0
NOVA SCOTIA	0.3	0.3	0.2	0.5	0.2	0.2	0.7	0.2	0.8	0.1	0.0	0.3
NEW BRUNSWICK	0.1	0.0	0.0	0.2	0.1	0.0	0.3	0.0	0.3	0.0	0.3	0.0
QUEBEC	2.3	1.9	1.0	2.9	1.7	2.5	1.7	3.7	2.5	2.7	2.3	0.8
ONTARIO	70.1	77.6	67.7	62.4	67.8	79.7	64.1	69.6	72.8	67.9	76.0	59.0
MANITOBA	0.5	0.7	0.4	0.6	0.3	0.6	0.3	0.8	0.1	0.2	0.3	0.4
SASKATCHEWAN	0.6	1.0	0.5	0.5	0.5	0.6	0.2	0.6	0.9	0.6	0.1	0.8
ALBERTA	3.5	2.7	2.0	2.3	3.2	2.9	3.0	8.4	2.9	2.1	5.4	3.6
B.C./YUKON / N.W.T.	1.9	1.5	1.9	1.6	1.3	1.4	2.1	2.9	4.5	2.1	2.8	0.4
SUB-TOTAL (CANADA)	80.1%	86.4%	74.0%	71.6%	75.4%	88.5%	73.3%	86.9%	88.6%	79.6%	84.8%	65.7%

* numbers may not total exactly because of weighting;
 percents may not sum to 100.0 because of rounding.

** less than 0.05%

continued ...

TABLE 10 (CONT'D)
MIGRATION PATTERNS BY FIELD OF STUDY*

PRESENT LOCATION	TOTAL	FIELD OF STUDY										
		EDUC. PHE/ REC LEIS.	FINE & APP. ARTS	HUMAN & REL.	SOCIAL SCI.	COMM. & BUS.	AGRIC. & BIOL. SCI.	ENG. & APP. SCI.	HEALTH PROF.	MATH & PHYS. SCI.	L.L.B. & L.L.L.	A.&S. (NO MAJOR) & N/S
TOTAL RESP. (100%)	19649	3218	561	2739	4563	1999	1545	1917	1151	1255	451	247
U.S.A.	1.1%	0.3%	2.7%	1.2%	1.0%	0.7%	1.4%	1.8%	1.9%	1.8%	0.3%	0.0%
CENTRAL AMERICA	0.2	0.3	0.3	0.2	0.4	0.1	0.2	0.2	0.0	0.4	0.0	0.0
SOUTH AMERICA	**	**	0.0	**	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0
EUROPE	0.4	0.1	0.3	0.7	0.4	0.2	0.5	0.4	0.4	0.4	0.0	0.0
AFRICA	0.7	0.1	0.2	0.2	0.7	1.6	0.4	2.1	0.1	1.8	0.0	1.2
ASIA	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.6	0.1	0.4	0.0	1.0
OCEANIA	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.3	0.1	0.0	0.0	0.0
NOT STATED	7.0	6.3	10.8	9.7	8.1	4.9	8.0	3.4	4.4	4.4	8.5	12.8
NEVER EMPLOYED	10.1	6.3	11.3	16.0	13.8	3.8	15.9	4.2	4.5	10.3	6.3	19.3
TOTAL	100.0%	16.4%	2.9%	13.9%	23.2%	10.2%	7.9%	9.8%	5.9%	2.3%	6.4%	1.3%

* numbers may not total exactly because of weighting;
percents may not sum to 100.0 because of rounding.

** less than 0.05%

TABLE 11
MIGRATION PATTERNS BY LEVEL OF QUALIFICATION*

PRESENT LOCATION	TOTAL	LEVEL OF QUALIFICATION				
		BACHELOR'S	1ST PROFESSIONAL	MASTERS	PHD	DIPLOMA CERT/OTHER
TOTAL RESPONDENTS (100%)	19649	14932	1039	1964	228	1486
Maritimes	1.2%	1.0%	3.2%	1.7%	3.7%	1.0%
Quebec	2.3	2.2	3.2	2.9	6.4	1.7
Ontario	70.1	69.4	73.7	70.4	50.3	77.3
Prairies	4.6	4.7	4.3	4.7	6.8	3.3
BC/Yukon/NWT	1.9	1.8	3.3	2.2	3.3	0.9
SUB-TOTAL (CANADA)	80.1%	79.1%	87.7%	82.0%	70.4%	83.2%
U.S.A.	1.1	0.8	1.1	2.2	12.9	0.5
Central America	0.2	0.3	0.1	0.2	0.5	0.2
South America	**	**	0.0	0.2	3.5	0.0
Europe	0.4	0.3	0.1	0.7	1.9	0.1
Africa	0.7	0.8	0.0	0.9	0.9	0.1
Asia	0.2	0.2	0.0	0.7	0.7	0.2
Oceania	0.1	0.1	0.0	0.4	2.0	0.0
Not Stated	7.0	7.0	7.0	6.8	4.2	7.0
Never Employed	10.1	11.4	4.0	6.0	3.9	8.6
TOTAL	100.0%	76.0%	5.3%	10.0%	1.2%	7.6%

* numbers may not total exactly because of weighting;
percents may not sum to 100.0 because of rounding
** less than 0.05%

2.4 Starting and Current Salary Data

In the pre-test, some resistance was found towards giving salary data. Because salary information is such a sensitive issue, rather than requesting specific salary data the graduate was given a series of salary ranges and asked to indicate which range best matched both starting and current salary. Between \$6,000 and \$30,000 per annum, the salary ranges increased by increments of \$2,000. Above \$30,000, the increments were increased to \$5,000. The top category was \$40,000 per annum or more. In total, 3.9% of those graduates presently employed full-time did not state, or refused to state, a starting salary range; this increased to 11.2% for data on current salary.

The results from the survey on approximate starting salaries by field of study are presented in Table 12. For the primary analyses, the salary ranges have been grouped into larger categories. In Table 12 the percents are shown as cumulative. For example, 8.3% of graduates who are presently employed full-time started with a salary of less than \$6,000; 25.2% started with a salary of \$10,000 or less. Increasing the range to \$14,000, the results in Table 12 show that 52.7% of all graduates who are presently employed full-time started with a salary at this level or lower.

Studying the results presented in Table 12, it is possible to see those fields of study which had, on average, higher starting salaries. For example, only 3.9% of graduates from Engineering and Applied Science started at a salary level less than \$10,000. At the other extreme, 51.9% of graduates from programs in the Fine and Applied Arts started at salaries less than \$10,000. Other program areas where graduates started at similarly low levels (i.e. less than \$10,000) are the Humanities and related program areas, and Arts and Science graduates with no major.

Some of the highest starting levels were obtained by graduates in Engineering and Applied Science, the Health Professions, and Commerce and Business Administration.

(Reference: Table 12)

A similar analysis by field of study but showing current salary levels is presented in Table 13. It is interesting to note from this table how the salaries for graduates in Education and Physical and Health Education have increased. Almost 50% of graduates from these programs started at less than \$14,000 per year (48.8%). Now, only 24.7% of graduates from this program earn less than this.

TABLE 12

APPROXIMATE STARTING SALARY BY FIELD OF STUDY*
(FULL-TIME EMPLOYED)

APPROXIMATE STARTING SALARY**	TOTAL	FIELD OF STUDY									A. & S. (NO MAJOR) & N/S
		EDUC. PHE/ REC LEIS.	FINE & APP. ARTS	HUMAN. & REL.	SOCIAL SCI.	COMM. & BUS.	AGRIC. & BIOL. SCI.	ENG. & APP. SCI.	HEALTH PROF.	MATH & PHYS. SCI.	
TOTAL RESPONDENTS (100%)	11626	2169	257	1379	2483	1373	817	1486	741	804	117
LESS THAN \$6,000	8.3%	10.3%	19.9%	13.8%	12.0%	2.0%	11.0%	1.3%	2.7%	2.9%	16.8%
UP TO \$ 9,999	25.2	26.0	51.9	46.2	35.7	12.5	33.5	3.9	8.9	10.1	45.2
UP TO \$13,999	52.7	48.8	84.5	79.3	67.6	49.6	68.6	18.3	24.7	36.9	70.9
UP TO \$17,999	82.2	82.6	91.9	90.8	85.8	69.7	91.2	75.6	73.0	86.5	78.0
UP TO \$21,999	90.0	89.6	94.3	93.3	92.3	84.0	95.8	94.3	83.7	95.6	87.2
UP TO \$29,999	94.6	92.6	95.5	94.9	95.1	93.8	96.9	97.0	91.1	97.2	90.7
UP TO \$30,000 OR MORE	96.0	94.5	95.9	95.1	95.8	96.9	97.7	97.9	97.1	97.4	93.3
NOT STATED/REFUSED	3.9	5.5	4.2	4.8	4.4	3.3	2.4	2.0	3.0	2.6	6.7
TOTAL	100.0%	18.7%	2.2%	11.9%	21.4%	11.8%	7.0%	12.8%	6.4%	6.9%	1.0%

* numbers may not total exactly because of weighting;
percents may not sum to 100.0 because of rounding.

** percents shown as cumulative.

Commerce and Business Administration shows a similar increase. Almost 50% of graduates in this field started at less than \$14,000. Now, only 25.8% earn a salary below this level.

(Reference: Table 13)

Another format for presenting salary data, without calculating medians, is presented in Table 14. This table shows the minimum salary level which covers at least 50% of the graduates. Data on both starting and current salary levels are shown. Based on this analysis, the graduates receiving the best starting salary appear to be from the Engineering and Applied Science. At least 50% from these programs earn a minimum of \$16,000 per annum. The comparable current salary for this group, also shown in Table 14, is \$18,000. This is still the highest level among all programs. Based on starting salaries, the second best positions are achieved by graduates from the Health Professions and from Mathematics and Physical Sciences - at \$14,000 per annum. Using current salary figures, these two program groups are joined by Commerce and Business Administration - at \$16,000 per annum.

TABLE 13

APPROXIMATE CURRENT SALARY BY FIELD OF STUDY*
(FULL-TIME EMPLOYED)

APPROXIMATE CURRENT SALARY**	TOTAL	FIELD OF STUDY									
		EDUC. PHE/ REC LEIS.	FINE & APP. ARTS	HUMAN. & REL.	SOCIAL SCI.	COMM. & BUS.	AGRIC. & BIOL. SCI.	ENG. & APP. SCI.	HEALTH PROF.	MATH & PHYS. SCI.	A.& S. (NO MAJOR) & N/S
TOTAL RESPONDENTS (100%)	11626	2169	257	1379	2483	1373	817	1486	741	804	117
LESS THAN \$6,000	1.8%	1.8%	11.1%	3.0%	1.7%	0.3%	4.1%	0.5%	0.7%	1.0%	2.6%
UP TO \$ 9,999	9.7	7.6	31.2	21.8	13.1	2.8	17.1	1.5	2.3	3.3	14.3
UP TO \$13,999	31.5	24.7	68.0	52.8	42.5	25.8	50.7	8.5	10.7	18.0	45.2
UP TO \$17,999	59.0	59.9	80.1	70.6	63.5	49.9	76.4	37.5	56.9	55.2	57.3
UP TO \$21,999	74.9	68.4	86.8	77.1	75.4	65.6	84.8	78.9	71.8	84.7	68.9
UP TO \$29,999	84.5	77.9	90.8	85.5	86.4	80.1	88.1	88.1	81.4	91.6	79.2
UP TO \$30,000 OR MORE	88.9	86.6	91.2	87.3	89.0	90.3	89.4	90.6	86.8	92.0	85.2
NOT STATED/REFUSED	11.2	13.4	8.8	12.7	10.9	9.9	10.5	9.5	13.3	7.8	15.0
TOTAL	100.0%	18.7%	2.2%	11.9%	21.45	11.8%	7.0%	12.8%	6.4%	6.9%	1.0%

* numbers may not total exactly because of weighting'
percents may not sum to 100.0 because of rounding.

** percents shown as cumulative.

The data presented in Table 14 demonstrates that, on average, at least 50% of graduates who are presently employed full-time started with a salary level not less than \$12,000 per annum and 50% now earn a salary not less than \$14,000 per annum. Some of the categories currently earning below the average level include graduates from the Fine and Applied Arts programs and the Humanities and related areas.

(Reference: Table 14)

Starting and current salaries were also analyzed by sex. The results, presented in Tables 15 to 17, are similar in structure to data presented on salaries by field of study. The results presented in Table 15 (approximate starting salary by sex) show that female graduates definitely start at lower salary levels than male graduates. For example, 35.4% of all female graduates started at salary levels less than \$10,000 per annum in comparison with male graduates where only 16.4%, less than half that of female graduates, started at less than \$10,000.

(Reference: Table 15)

TABLE 14

MINIMUM SALARY LEVEL COVERING AT LEAST 50%
OF GRADUATES BY FIELD OF STUDY

(FULL-TIME EMPLOYED)

FIELD OF STUDY	MINIMUM SALARY COVERING AT LEAST 50% OF GRADUATES	
	STARTING SALARY	CURRENT SALARY
TOTAL RESPONDENTS (100%)	11626	11626
EDUCATION/PHE	\$12,000	\$14,000
FINE & APPLIED ARTS	\$ 8,000	\$10,000
HUMANITIES & RELATED	\$ 8,000	\$10,000
SOCIAL SCIENCE	\$10,000	\$12,000
COMMERCE & BUS. ADMIN.	\$12,000	\$16,000
AGRIC. & BIOL. SCI.	\$10,000	\$12,000
ENGINEERING & APPLIED SCIENCE	\$16,000	\$18,000
HEALTH PROF.	\$14,000	\$16,000
MATH. & PHYSICAL SCI.	\$14,000	\$16,000
ARTS & SCIENCE (no major) & NOT STATED	\$ 8,000	\$12,000
TOTAL	\$12,000	\$14,000

TABLE 15
APPROXIMATE STARTING SALARY BY SEX*
(FULL-TIME EMPLOYED)

STARTING SALARY	TOTAL	SEX		
		MALE	FEMALE	NOT STATED
TOTAL RESPONDENTS (100%)	11626	6169	5365	92
LESS THAN \$ 6,000	8.3%	5.5%	11.6%	5.4%
UP TO \$ 9,999	25.2	16.4	35.4	14.1
UP TO \$13,999	52.7	43.0	64.3	21.1
UP TO \$17,999	82.2	76.9	89.2	37.0
UP TO \$21,999	91.0	89.1	93.7	71.2
UP TO \$29,999	94.6	94.1	95.6	77.6
UP TO \$30,000 OR MORE	96.0	96.4	96.0	77.6
NOT STATED/REFUSED	3.9	3.6	3.9	22.4
TOTAL	100.0%	53.1%	46.1%	0.8%

* numbers may not total exactly because of weighting,
percents may not sum to 100.0 because of rounding.

** percents shown are cumulative.

Analysis of current salary levels shows very similar results (Table 16). Only 23% of male graduates who are employed on a full-time basis earn less than \$14,000 per annum (compared with 43% of male graduates who started at less than \$14,000 per annum). Again, the proportion of female graduates currently earning less than \$14,000 is considerably higher - 41.7% compared with 64.3% of female graduates who started at less than \$14,000).

(Reference: Table 16)

The data in Table 17 shows the minimum salary level covering at least 50% of graduates by sex. At least 50% of all female graduates employed on a full-time basis would be covered by a minimum starting salary of \$10,000 per annum. The similar level for male graduates, on the other hand, would be \$14,000. Both groups show an increase at current salary levels - males to \$16,000 per annum and females to \$12,000 per annum.

(Reference: Table 17)

One of the immediate conclusions that might be drawn from this data is that females, on average, receive lower starting salaries, and are continuing to receive lower salaries, than male graduates. However, a closer look at the data reveals that, in fact, this may not be a valid conclusion. As indicated previously (Table 13 and Table 14), the highest current salaries are being paid to graduates

TABLE 16
APPROXIMATE CURRENT SALARY BY SEX*
(FULL-TIME EMPLOYED)

CURRENT SALARY**	TOTAL	SEX		
		MALE	FEMALE	NOT STATED
TOTAL RESPONDENTS (100%)	11626	6169	5365	92
LESS THAN \$6,000	1.8%	1.1%	8.7%	1.1%
UP TO \$ 9,999	9.7	5.1	15.1	5.5
UP TO \$13,999	31.5	23.0	41.7	9.5
UP TO \$17,999	59.0	50.5	69.3	25.3
UP TO \$21,999	74.9	71.2	79.3	62.6
UP TO \$29,999	84.5	82.7	86.5	66.9
UP TO \$30,000 OR MORE	88.9	89.3	88.4	70.0
NOT STATED/REFUSED	11.2	10.5	11.7	30.0
TOTAL	100.0%	53.1%	46.1%	0.8%

* numbers may not total exactly because of weighting;
percents may not sum to 100.0 because of rounding

** percents shown are cumulative

TABLE 17

MINIMUM SALARY LEVEL COVERING AT LEAST 50%
OF GRADUATES BY SEX

SEX	MINIMUM SALARY COVERING AT LEAST 50% OF GRADUATES	
	STARTING SALARY	CURRENT SALARY
TOTAL RESPONDENTS (100%)	11626	11626
MALE	\$14,000	\$16,000
FEMALE	\$10,000	\$12,000
NOT STATED	\$14,000	\$14,000
TOTAL	\$12,000	\$14,000

from Engineering and Applied Science, and Commerce and Business Administration. An analysis of field of study by sex is presented in Table 18 for respondents who are presently employed on a full-time basis. As this table demonstrates, a greater proportion of males graduated from Engineering and Applied Science and Commerce and Business Administration programs than females. These two program areas account for 38.4% of all male graduates; on the other hand, only 8.8% of all females graduated from these two fields of study. While this is not conclusive evidence of the reasons for differences between male and female graduates in both starting and current salaries, the data does serve to emphasize that considerable care must be exercised in interpreting and analyzing salary information. The data would also seem to indicate that any comparison between male and female graduates will have to be done on a program-by-program basis and by level of qualification. Also, it may be necessary to introduce other components into the analysis such as occupation and S.I.C. group since these variables will also affect salary levels.

(Reference: Table 18)

TABLE 18
FIELD OF STUDY BY SEX*
(FULL-TIME EMPLOYED)

FIELD OF STUDY	TOTAL	SEX		
		MALE	FEMALE	NOT STATED
TOTAL RESPONDENTS (100%)	11626	6169	5365	92
EDUCATION /PHE/ REC/LEIS	18.7%	13.9%	23.6%	47.8%
FINE & APPLIED ARTS	2.2	1.6	2.9	1.1
HUMANITIES & RELATED	11.9	7.5	17.0	9.9
SOCIAL SCIENCE & RELATED	21.4	18.3	25.0	12.8
COMMERCE & BUS. ADMIN.	11.8	16.5	6.5	8.6
AGRIC. & BIOL. SCIENCE	7.0	6.8	7.3	4.4
ENG. & APPLIED SCIENCE	12.8	21.9	2.3	9.6
HEALTH PROFESSIONS	6.4	3.5	9.8	3.6
MATH & PHYSICAL SCIENCES	6.9	9.1	4.5	0.0
ARTS & SCIENCES (no major) & NOT STATED	1.0	0.9	1.1	2.2
TOTAL	100.0%	53.1%	46.1%	0.8%

* numbers may not total exactly because of weighting;
percents may not sum to 100.0 because of rounding.

2.5 S.I.C. Group and Occupation

An analysis of the S.I.C. group for graduates currently employed on a full-time basis is presented in Table 19. This analysis is shown by field of study. As might be expected, there is a definite correlation between certain fields of study and S.I.C. groups. For example, 42% of all graduates from Engineering and Applied Science are presently employed in the manufacturing sector; 18% of all graduates from Agriculture and Biological Science programs are currently employed in the agriculture sector.

Some of the more surprising results are the incidence of graduates from Fine and Applied Arts presently employed in manufacturing (12.1%) and, overall, the low percentage of graduates presently employed in the government sector (8.6%).

The commercial and business service sector includes a wide variety of occupations such as education, health, and business services. It is difficult to make any conclusions related to the data for this group except to note that when added to other S.I.C. groups considered to be in the service sector, the total number of graduates presently employed in the service, or tertiary, sector increases to almost two-thirds (63.9%) of the total sample. The raw data collected in this study has been coded to a sufficient level of detail to permit further analysis of the S.I.C. classification at a later date.

(Reference: Table 19)

TABLE 19
S.I.C. GROUP (CURRENT OCCUPATION) BY FIELD OF STUDY*
(FULL-TIME EMPLOYED)

S. I. C.	TOTAL	FIELD OF STUDY									
		EDUC. PHE/ REC LEIS.	FINE & APP. ARTS	HUMAN. & REL.	SOCIAL SCI.	COMM. & BUS.	AGRIC. & BIOL. SCI.	ENG. & APP. SCI.	HEALTH PROF.	MATH & PHYS. SCI.	A. & S. (NO MAJOR) & N/S
TOTAL RESPONDENTS (100%)	11626	2169	257	1379	2483	1373	817	1486	741	804	117
AGRICULTURE	1.5%	0.1%	0.8%	0.5%	0.4%	0.1%	17.9%	0.3%	0.1%	0.4%	0.0%
FORESTRY	0.3	0.0	0.0	0.0	0.1	0.1	0.5	1.7	0.0	0.0	0.0
FISHING	**	0.0	0.0	0.0	**	0.0	0.1	0.1	0.0	0.0	0.0
MINING/OIL	2.0	0.1	0.4	0.6	1.0	1.3	0.6	6.3	0.3	9.1	4.3
MANUFACTURING	16.2	2.5	12.1	13.4	10.7	24.4	18.8	42.1	0.7	26.4	13.3
CONSTRUCTION	1.2	0.2	1.9	1.1	1.2	1.1	1.3	3.2	0.0	0.6	1.5
TRANSPORTATION COMMUNICATION UTILITIES	5.4	2.8	3.1	8.0	4.4	4.9	2.1	12.0	0.1	8.3	4.6
TRADE	6.6	2.5	12.7	8.4	7.8	10.2	8.3	2.2	10.0	5.0	10.9

* numbers may not total exactly because of weighting;
percents may not sum to 100.0 because of rounding
** less than 0.05%

continued ...

TABLE 19 (CONT'D)

S.I.C. GROUP (CURRENT OCCUPATION) BY FIELD OF STUDY*
(FULL-TIME EMPLOYED)

S.I.C.	TOTAL	FIELD OF STUDY									A. & S. (NO MAJOR) & N/S
		EDUC. PHE/ REC LEIS.	FINE & APP. ARTS	HUMAN. & REL.	SOCIAL SCI.	COMM. & BUS.	AGRIC. & BIOL. SCI.	ENG. & APP. SCI.	HEALTH PROF.	MATH & PHYS. SCI.	
TOTAL RESPONDENTS (100%)	11626	2169	257	1379	2483	1373	817	1486	741	804	117
FINANCE/ INSURANCE/ REAL ESTATE	7.3%	2.3%	1.9%	7.2%	12.3%	17.1%	4.3%	0.7%	0.1%	11.1%	9.2%
COMMERCIAL / BUSINESS & PERSONAL SERVICES***	48.0	81.6	59.4	49.2	44.3	27.7	32.7	22.2	82.2	30.3	39.3
FEDERAL GOV'T	3.8	1.7	1.2	4.9	5.6	5.4	5.0	2.4	0.7	3.3	5.8
PROVINCIAL GOV'T	3.0	1.4	1.5	2.5	5.3	2.2	5.3	2.6	1.5	2.6	3.4
MUNICIPAL GOV'T	1.8	1.1	0.4	0.8	3.0	2.7	0.9	2.6	1.6	0.9	0.9
NOT DEFINED	3.0	3.5	4.5	3.3	3.8	2.9	2.2	1.4	2.5	2.0	6.7
TOTAL	100.0%	18.7%	2.2%	11.9%	21.4%	11.8%	7.0%	12.8%	6.4%	6.9%	1.0%

* numbers may not total exactly because of weighting;
percentages may not sum to 100.0 because of rounding.

** less than 0.05%

*** includes Education, Health, Libraries, Engineering, Consulting

Data relating current occupation to field of study are presented in Table 20. The Canadian Classification Dictionary of Occupations (CCDO) was used to code initial and current occupations. The CCDO codes contain four digits to record significant details related to any occupation. Initially, an attempt was made to use the four digit level from the CCDO. However, it soon became apparent that many of the respondents did not provide sufficient details on their jobs to permit coding to this level of detail. Therefore, a decision was made to code to the three digit level of the CCDO.

In Table 20, the data has been grouped to the second digit level. Also, all clerical and manufacturing tasks such as assembly and construction have been grouped into a single category. Approximately 14% of all graduates who are presently employed on a full-time basis are classified in this category. The proportion is highest in Agriculture and Biological Sciences (25.7%). Other fields of study with correspondingly high rates are Humanities (24.9%) and Arts and Science with no stated major (24.4%).

Most of the remaining cells follow expected patterns. More than one-half of Commerce and Business Administration graduates are in management; 66.6% of Education graduates are in teaching; 63.5% of engineers are employed in engineering occupations and 87.9% of Health graduates are in health related jobs.

(Reference: Table 20)

TABLE 20

CURRENT OCCUPATION BY FIELD OF STUDY*
(FULL-TIME EMPLOYED)

CURRENT OCCUPATION	TOTAL	FIELD OF STUDY									
		EDUC. PHE/ REC LEIS.	FINE % APP. ARTS	HUMAN- % REL.	SOCIAL SCI.	COMM. & BUS.	AGRIC. & BIOL. SCI.	ENG. & APP. SCI.	HEALTH PROF.	MATH & PHYS. SCI.	A. & S. (NO MAJOR) & N/S
TOTAL RESPONDENTS (100%)	11626	2169	257	1379	2483	373	817	1486	741	804	117
Management Physical Sciences Life Sciences Architect/Engineer Math/Statistics Social Sciences Teaching/Sport Medicine/Health Art/Lit/Perform Sales Services Clerical/Assembly/ Construction/ Operators Other** Not Stated	17.3%	8.7%	8.2%	12.4%	20.4%	57.1%	9.7%	8.2%	4.5%	11.8%	12.0%
	3.1	0.4	0.8	0.1	1.1	0.1	13.0	2.7	1.1	19.4	6.0
	1.2	0.4	0.0	0.2	0.4	0.1	7.9	2.8	0.4	1.4	1.7
	9.7	0.3	2.6	0.3	2.2	4.4	2.4	63.5	0.0	4.0	0.0
	4.6	0.3	0.4	0.8	1.2	5.8	1.7	5.9	0.1	37.3	4.9
	7.5	6.7	14.4	11.4	18.7	1.8	2.8	0.4	0.4	0.7	8.7
	19.7	66.6	8.7	16.8	13.8	1.3	9.7	3.3	1.7	9.9	16.1
	7.4	1.2	0.8	0.7	2.1	0.4	12.3	0.0	87.9	0.2	4.1
	2.7	0.5	32.7	12.0	1.3	0.4	0.6	0.5	0.0	0.6	2.3
	6.7	3.3	7.0	7.8	9.5	13.5	8.0	2.8	0.6	4.0	10.3
	2.0	1.3	2.9	3.3	3.0	2.4	4.0	0.4	0.1	0.9	3.0
	14.4	7.0	18.0	24.9	22.0	10.4	25.7	8.0	1.1	8.2	24.4
	0.9	0.0	0.4	6.1	0.6	0.0	0.0	0.0	0.2	0.0	0.0
	2.8	3.3	3.1	3.2	3.7	2.3	2.2	1.5	1.9	1.6	6.5
TOTAL	100.0%	18.7%	2.2%	11.9%	21.4%	11.8%	7.0%	12.8%	6.4%	6.9%	1.0%

* numbers may not total exactly because of weighting;
percents may not sum to 100.0 because of rounding

** includes Religion and Law.

2.6 Level of Satisfaction With Relating Current Job To Education

Using the scale of "1" to "4" where "1" would be applied to a job "very related" to the educational background of the graduate while "4" would be interpreted as "not at all related", the 1979 graduates gave an average rating of 1.88 to the relationship between their current job and their most recent education. The mean score varied considerably from a 1.13 by graduates of the Health Professions (interpreted as a job "very related" to their education) to a high of 2.67 scored by Arts and Science graduates with no major. The second highest score was recorded by graduates in the Humanities and related subjects (mean of 2.52). Again, this can be interpreted as a job "not very related" to educational background.

Similar conclusions can be drawn by looking at the percentage of graduates who scored in the very highest category (i.e. "very related"). The highest proportion of graduates indicating that their job was "very related" to their most recent education was recorded by graduates in the Health Professions (88.8%), Education and Physical and Health Education (66.4%), and Engineering and Applied Science (56.3%).

At the other end of the scale "not at all related", the highest scores were given by Arts and Science graduates with no major (30%), Humanities and related program areas (29.6%) and graduates in Social Science (22.4%).

(Reference: Table 21)

TABLE 21
RELATIONSHIP OF CURRENT JOB TO EDUCATION BY FIELD OF STUDY*
(FULL-TIME EMPLOYED)

HOW RELATED JOB TO EDUCATION	TOTAL	FIELD OF STUDY									A. & S. (NO MAJOR) & N/S
		EDUC. PHE/ REC LEIS.	FINE APPLIED ARTS	HUMAN. & REL.	SOCIAL SCI.	COMM. & BUS.	AGRIC. & BIOL. SCI.	ENG. & APP. SCI.	HEALTH PROF.	MATH & PHYS. SCI.	
TOTAL RESPONDENTS (100%)	11626	2169	257	1379	2483	1373	817	1486	741	804	117
VERY RELATED	47.9%	66.4%	36.8%	26.2%	25.9%	50.8%	47.3%	56.3%	88.8%	54.1%	13.1%
SOMEWHAT RELATED	26.7	17.1	35.3	24.3	33.3	34.9	25.4	32.6	6.3	27.0	35.2
NOT VERY RELATED	9.7	4.7	7.7	17.0	15.4	7.6	7.3	7.2	1.0	11.8	16.4
NOT AT ALL RELATED	13.2	9.0	18.2	29.6	22.4	4.3	17.3	2.5	1.7	5.3	30.0
REFUSED / DO NOT KNOW / NOT STATED	2.5	2.7	1.9	2.9	3.1	2.4	2.7	1.4	2.1	1.7	5.2
TOTAL	100.0%	18.7%	2.2%	11.9%	21.4%	11.8%	7.0%	12.8%	6.4%	6.9%	1.0%
MEANS**	1.88	1.55	2.07	2.52	2.35	1.65	1.94	1.55	1.13	1.68	2.67

* numbers may not total exactly because of weighting;
percents may not sum to 100.0 because of rounding.
** based on a weighting of Very Related (x 1) to
Not At All Related (x 4)

Graduates were also asked to indicate the level of satisfaction in their current job with present salary, opportunity for advancement, and opportunity for personal initiative. The results are cross-tabulated with the scores relating present job to field of study in Tables 22 to 24. The results in Table 22 show that, overall, 69.4% of all graduates are either quite satisfied or very satisfied with their present salary level. At the opposite extreme, 28.1% are either not very satisfied or not at all satisfied. The remaining 2.5% either reported that the question was not applicable to them or did not state a response. As might be expected, the proportions vary considerably by how related the respondent felt their present job was to the field of study at graduation.

For example, 76.4% of all graduates who considered that their job was "very related" to their field of study indicated that they were either quite satisfied or very satisfied with their present salary level. On the other hand, only 52.7% of graduates who considered that their present job was "not at all related" to their field of study indicated that they were quite satisfied or very satisfied with their present salary level. Again, using a rating score of "1" to reflect "very satisfied" and "4" to indicate "not at all satisfied", the overall mean was 2.15.

Those graduates who indicated that their job was 'very related' to their field of study scored a mean of 1.89; those who indicated it was "somewhat related" scored 2.15; those who indicated "not very related" scored 2.2, and those who said it was "not at all related" scored 2.5 (in other words, halfway between quite satisfied and not very satisfied).

(Reference: Table 22)

The mean scores for "level of satisfaction with opportunity for advancement" showed a slightly larger range varying from 2.07 for those who indicated that the relationship of their present job to field of study was "very related" to a high of 2.61 for those who considered it "not at all related". In total, 64.6% of the graduates indicated that they were either "quite satisfied" or "very satisfied" with the opportunity for advancement, a result considerably lower than the proportion indicating similar levels of satisfaction with present salary.

(Reference: Table 23)

This trend reverses itself in the mean scores for "level of satisfaction with opportunity for personal initiative" (Table 24). Here, the average score is reduced to 1.91 based on a weighting of '1' for 'very satisfied' to '4' for 'not at all satisfied'. Those who indicated the relationship of present job to field of study to be

TABLE 22

LEVEL OF SATISFACTION WITH SALARY BY
RELATIONSHIP OF JOB TO FIELD OF STUDY*
(FULL-TIME EMPLOYED)

LEVEL OF SATISFACTION - SALARY	TOTAL	RELATIONSHIP OF JOB TO FIELD OF STUDY				
		VERY RELATED	SOMEWHAT RELATED	NOT VERY RELATED	NOT AT ALL RELATED	NOT STATED* REFUSED
TOTAL RESPONDENTS (100%)	11626	5568	3100	1131	1536	292
VERY SATISFIED	20.4 49.0	24.6 51.8	19.8 50.9	17.3 51.5	11.4 40.7	5.1 10.0
QUITE SATISFIED		76.4%	70.7%	68.8%	52.7%	15.1%
NOT VERY SATISFIED	21.8 6.3	18.3 4.8	23.2 6.0	24.2 6.5	33.3 13.6	2.7 0.4
NOT AT ALL SATISFIED		23.1%	29.2%	30.7%	46.9%	3.1%
NOT APPLICABLE/NOT STATED	2.5 2.5%	0.5 0.5%	0.2 0.2%	0.4 0.4%	1.0 1.0%	81.8 81.8%
TOTAL	100.0%	47.9%	26.7%	9.7%	13.2%	2.5%
MEAN**	2.15	1.89	2.15	2.20	2.50	1.91

* numbers may not total exactly because of weighting;
percents may not sum to 100.0 because of rounding.
** based on weights of Very Satisfied (x 1) to
Not At All Satisfied (x 4)

TABLE 23
LEVEL OF SATISFACTION WITH OPPORTUNITY FOR
ADVANCEMENT BY RELATIONSHIP OF JOB TO FIELD OF STUDY*
(FULL-TIME EMPLOYED)

LEVEL OF SATISFACTION - OPPORTUNITY FOR ADVANCEMENT	TOTAL	RELATIONSHIP OF JOB TO FIELD OF STUDY				
		VERY RELATED	SOMEWHAT RELATED	NOT VERY RELATED	NOT AT ALL RELATED	NOT STATED* REFUSED
TOTAL RESPONDENTS (100%)	11626	5568	3100	1311	1536	292
VERY SATISFIED	21.4 64.6%	23.6 72.8%	21.9 66.3%	20.6 57.1%	16.0 47.0%	3.7 10.6%
QUITE SATISFIED	43.2	49.2	44.4	36.5	31.0	6.9
NOT VERY SATISFIED	21.7 41.3%	19.0 24.9%	23.7 32.3%	28.4 40.3%	26.1 50.7%	3.5 5.9%
NOT AT ALL SATISFIED	9.6	5.9	8.6	11.9	24.6	2.4
NOT APPLICABLE/NOT STATED	4.1 4.1%	2.3 2.3%	1.3 1.3%	2.6 2.6%	2.3 2.3%	83.5 83.5%
TOTAL	100.0%	47.9%	26.7%	9.7%	13.2%	2.5%
MEAN**	2.20	2.07	2.19	2.32	2.61	2.27

* numbers may not total exactly because of weighting;
percents may not sum to 100.0 because of rounding.
** based on weights of Very Satisfied (x 1) to
Not At All Satisfied (x 4)

"very related" scored 1.68 with 87% indicating that they were either "quite satisfied" or "very satisfied" with the opportunity for personal initiative. Only 48.7%, on the other hand, of those graduates who indicated that their job was "not at all related" to their field of study indicated that they were satisfied with the opportunity for personal initiative. On average, this group scored 2.59.

(Reference: Table 24)

The results from these tables indicate that the relationship of an occupation to the field of study at graduation is a very important factor when considering satisfaction with three of the primary ingredients of a job - salary, opportunity for advancement, and opportunity for personal initiative. It would appear that in order to achieve a reasonable level of satisfaction with these three elements, it is important for the graduate to find an occupation which is related to their field of study. This would appear to be another area which merits further investigation and analysis of the data file.

TABLE 24
LEVEL OF SATISFACTION WITH OPPORTUNITY FOR PERSONAL
INITIATIVE BY RELATIONSHIP OF JOB TO FIELD OF STUDY*
(FULL-TIME EMPLOYED)

LEVEL OF SATISFACTION - OPPORTUNITY FOR PERSONAL INITIATIVE	TOTAL	RELATIONSHIP OF JOB TO FIELD OF STUDY				
		VERY RELATED	SOMEWHAT RELATED	NOT VERY RELATED	NOT AT ALL RELATED	NOT STATED* REFUSED
TOTAL RESPONDENTS (100%)	11626	5568	3100	1131	1536	292
VERY SATISFIED	37.1	46.4	34.6	29.0	20.1	5.4
QUITE SATISFIED	38.6	40.6	42.8	39.0	28.6	7.3
NOT VERY SATISFIED	13.3	9.1	14.1	20.3	24.0	2.8
NOT AT ALL SATISFIED	7.7	2.8	7.4	9.9	25.5	1.7
NOT APPLICABLE/NOT STATED	3.4	1.1	1.1	1.8	1.9	82.8
TOTAL	100.0%	47.9%	26.7%	9.7%	13.2%	2.5%
MEAN**	1.91	1.68	1.94	2.11	2.59	2.18

* numbers may not total exactly because of weighting;
percents may not sum to 100.0 because of rounding.
** based on weights of Very Satisfied (x 1) to
Not At All Satisfied (x 4)

3.0 BACKGROUND AND OBJECTIVES

In 1974, and again in 1975, the Ministry of Colleges and Universities requested Statistics Canada to conduct surveys of the graduates of the Ontario post-secondary system. In 1976, Statistics Canada carried out a similar survey across all Canada.

The purpose of these three studies was to relate the employment experience during the 18 months following graduation to the post-secondary background for a representative group of graduates. In addition, information was obtained on the difficulties experienced by the graduates in finding and retaining employment. Salary data was also collected together with a description of the graduates occupational activity.

Several Ontario universities and all the Colleges of Applied Arts and Technology (CAAT'S) conduct surveys of their own graduates approximately four to eight months following graduation. Many of the question areas in these surveys are similar to those on the provincial and national studies.

No provincial studies were undertaken covering either the 1977 or 1978 graduates.

In 1979, the Ministry of Colleges and Universities commissioned Thompson Lightstone & Company Limited to conduct a survey of the 1979 Spring graduates from the fifteen Ontario universities, Ryerson Polytechnical Institute, and the Ontario College of Art. As in the previous studies, the major objective was,

"to obtain data on the employment status of 1979 university graduates within a year after graduation and the relationship between that status and their post-secondary educational experience".

In fact, there were several objectives that the Ministry wished to achieve. Eleven specific objectives were identified in the Request for Proposals; these included.

- *present employment status.*
- *activities between graduation and the survey date.*
- *length of time between graduation and first employment.*
- *methods used in searching for employment.*
- *details of the first employment and current employment (including level of responsibility, sector of activity, employer location and salary).*
- *relationship between job requirements and level of qualification.*
- *relationship between job and field of study.*

- *relation between graduates expectations, present situation, and future prospects.*
- *the influence and value of employment and other experiences before graduation on present labour force status.*
- *the reasons behind the decisions of graduates to continue studies rather than seek employment.*
- *basic data such as discipline graduated from, level of qualification, institution, grade point average, sex, and age.*

Wherever possible, it was suggested that the data collected should be comparable to surveys done in previous years and those done by the institutions themselves. A listing of the study objectives as they appeared in the Request for Proposals is presented in Appendix A. Also included in the Appendix, opposite each objective, is a listing of those questions in the study questionnaire which contain information needed to measure the response.

One of the aims in the survey design was to develop an instrument which could be used in subsequent years. Initially it was thought that the questionnaire might consist of two portions; one portion would be applicable to the provincial requirements while the second part could be tailored to a specific institution's requirements.

Throughout the study, meetings were held with Ministry officials and university representatives. The objective of these meetings was to review the progress of the project and to provide input at various stages

such as questionnaire design and report outputs. In the initial stages of the questionnaire design the universities made requests to have data items added to the main part of the questionnaire. As far as possible, these requests were complied with. Some of the items added included;

- *number of post-secondary degrees held, if any.*
- *additional assistance which could have been provided in areas such as:*
 - *career counselling*
 - *preparing resumes*
 - *interviewing skills*
 - *job search techniques*
 - *actual job leads*
- *level of satisfaction in current job with salary, opportunity for advancement, and opportunity for personal initiative.*
- *whether or not a degree was specified by the employer (and if so, what degree).*
- *participation in organization or sports activities during post-secondary education.*

4.0 STUDY DESIGN AND METHODOLOGY

The first step in the project was to review questionnaires used in the 1974 and 1975 provincial surveys by Statistics Canada and the national survey conducted in 1976. Previous surveys used by several of the Ontario universities were also reviewed for their content. Since one of the objectives of the survey was to maintain compatibility with previous studies, every effort was made to construct a questionnaire which would both meet the objectives of the 1979 study while at the same time providing data which could be compared with the previous surveys.

The strategy agreed upon to achieve the design of an effective survey instrument was a three phase study. The first phase involved preliminary design of the questionnaire followed by a review with Ministry and university representatives. Revisions were discussed and a second draft prepared. This survey was then mailed to a representative sample of 500 graduates from 7 institutions. The institutions included in this pilot were Guelph, McMaster, Queen's, Toronto, Waterloo, Western and Wilfred Laurier. In addition, ten personal interviews were conducted with graduates from the University of Toronto who were still resident in the city. Following this pre-test, various comments and suggestions made by the respondents were reviewed and several changes incorporated into a revised survey questionnaire.

This was reviewed again with Ministry and university representatives and final changes made. Sufficient copies of the questionnaire were printed and mailed to all 1979 Spring graduates. This mailing was followed approximately two weeks later with a reminder card. After the lapse of an additional two weeks, a second copy of the questionnaire was mailed to all graduates from whom a completed questionnaire still had not been received. Some follow-up telephone calls were made to graduates from the Ontario College of Art because their response rate was well below that achieved by other institutions.

As questionnaires were returned, they were coded and sent for key-punching and keyverification. A computer program was written to check each questionnaire for logical consistency in the responses to each question and also that codes given for each question were within a valid range. Questionnaires which did not pass these tests were identified and corrections made. Once the data file had been cleaned, tabulations requested by the Ministry of Colleges and Universities were processed.

4.1 Project Management and Reporting

Throughout the course of the study, periodic written and verbal reports were transmitted to the steering committee appointed by the Ministry of Colleges and Universities to oversee the project. The composition of that steering committee is presented in Appendix B.

Also, several meetings were held with university representatives to discuss subjects such as questionnaire design and report outputs. The universities represented at those meetings are also listed in Appendix B.

In total, eleven meetings were held with the steering committee during the course of the project. Representatives of the participating universities were present at a majority of those meetings.

4.2 Questionnaire Design

Before commencing on the design of the questionnaire for this survey, previous questionnaires used by Statistics Canada and several of the Ontario universities were reviewed. The purpose of this review was to ensure that as many of the question areas as possible were repeated with the survey of 1979 graduates. In this way, compatability could be maintained between surveys in successive years. Several reports which contained analyses of the career paths of university and CAAT's graduates also were researched. This review covered the following documents:

- *surveys conducted by Statistics Canada (1974, 1975, and 1976)*
- *surveys conducted by Ontario universities (Guelph, Wilfrid Laurier, Western Ontario, and Toronto)*
- *survey of 1976 PhD recipients*
- *CAAT's 1977-78 placement report*

Of primary importance, however, was to design a questionnaire which would meet the objectives initially described in the Request for Proposals. The first draft of the questionnaire was prepared and submitted on October 19, 1979. This initial draft was forwarded to the university representatives for study. A meeting was convened involving both university representatives and Ministry officials to

review the first draft. A presentation was made illustrating how this draft met the requirements of the Request for Proposal while at the same time attempting to maintain continuity with previous surveys. Several suggestions were introduced for improvements both to the content of the questionnaire and its layout. These suggestions were incorporated and a second draft submitted to the Ministry.

The first step in the testing of the questionnaire was to mail a draft copy to a selected sample of 1979 graduates. A sample of 500 names was provided by the institutions participating in the study. A copy of the draft questionnaire was forwarded to each of the 500 graduates in the sample. At the same time, an additional 50 names were provided by the University of Toronto. Efforts were made to set up 10 personal interviews from this second sample.

With the mailing of the draft questionnaire, a covering letter was sent outlining the purpose of the survey and requesting the graduate not only to complete the questionnaire but also to comment on the following features:

- *content*
- *phrasing*
- *structure and flow*
- *comprehension*

A total of 186 returns were received from the initial mailout of 500 questionnaires (38% rate of return). In the initial proposal, it had been estimated that the initial rate of return would be approximately 30 to 35%.

The returns were analyzed by the following characteristics to ensure that the returns were representative:

- *the university graduated from*
- *level of degree or diploma received*
- *present employment status*
- *present location of graduates*
- *type of degree received*

The results showed that the returns appeared to be representative of the initial sample (although no statistical analysis was performed).

Valuable comments were received on the format of the questionnaire and its content. In particular several areas were highlighted by the respondents which had proven difficult to answer. Similar responses were found during the 10 personal interviews.

For future reference, it is perhaps valuable to summarize some of the concerns which were expressed during the pre-test of the questionnaire. Some of the major concerns included the following:

- *when employed between two degree programs, should this be considered?*
- *how to distinguish employment which is related to the first degree but not necessarily to the second, or most recent degree?*
- *temporary employment (i.e. plan to acquire permanent employment or pursue graduate work).*
- *temporary unemployment (staying out of employment for purposes such as travel).*
- *how to measure and indicate "under employment"?*
- *intent, or immediate, plans for change are not considered.*

Based on these suggestions, revisions were made to the draft questionnaire and the subsequent copy submitted to the Ministry and universities for final approval.

Originally, it had been planned to print the questionnaire on both sides of an 11 x 25-1/2 page. This would be folded to a 3 x 8-1/2 format (i.e. 6 plates in length). However, when the universities learned of the estimated mailing cost for a questionnaire of this size and weight, they

urged that an alternative format be considered in an attempt to reduce the questionnaire to the minimum postage required for first class mailing. In the end, this necessitated cutting several questions and reducing the print size in order to make it fit the size and weight constraints. The final format agreed upon was a questionnaire four pages in length each page printed on 8-1/2 x 14. This questionnaire was approved by the Ministry in January 1980 and submitted for typesetting and printing. The questionnaire was also translated into French and sufficient copies printed for all graduates from the University of Ottawa and Laurentian University. Copies of both the English and French versions of the questionnaire were presented in Appendix C of this report.

4.3 Mailing Activities

Five universities elected to conduct their own mailing. Sufficient copies of the questionnaire were forwarded to these universities. From the remaining universities, four sets of mailing labels for each of the 1979 Spring graduates were requested. In addition, each institution was requested to forward summary statistics of the number of 1979 Spring graduates by field of study and level of qualification. These statistics were used to control the number of returns and ensure that a representative sample was obtained from across the province.

The initial mailing of the questionnaire started in mid-February and was completed by the end of the first week in March.

Reminder cards were sent to all graduates approximately two weeks after the first mailing of the questionnaire. This reminder card emphasized the importance of the survey to educational planning in Ontario and urged the graduate to complete and return the questionnaire as soon as possible. The first reminder cards were mailed on March 10th, 1980.

As each completed questionnaire was received, it was booked by institution, field of study and level of qualification. Copies of selected pages of the booklet used for summarizing the completed questionnaires are presented in Appendix D.

At periodic intervals, summary results were entered onto a Field Management Reporting System. The Field Management System compares the number of returned questionnaires in each cell (defined by university, field of study, and level of qualification) with the original population to produce the following statistics:

- *Quota (or universe)*
- *New Data (i.e. recent returns)*
- *Updated Totals (recent returns plus returns recorded at last report run)*
- *Total (reported as a percentage of quota)*
- *Rate/Day (rate per day required to meet quota)*
- *Present Rate/Day*

With this Field Management System, it is possible to monitor the returns for each institution, field of study, and degree level. A final report run from this system is presented in Volume V.

As completed questionnaires were received, they were matched with a control file. The appropriate label showing the student name and address was removed from this file and affixed to the questionnaire. At the same time, the label was checked on a second control file to indicate that a completed questionnaire had been received.

Mailing of a second copy of the questionnaire commenced on March 24, 1980 to all graduates from whom a completed questionnaire still had not been received. Initially it was estimated that at the commencement of the second mailing the rate of return would be approximately 40% to 45%. In actual fact, the rate was running slightly lower at approximately 30% to 35%. One reason for this may have been the short length of time between the initial mailing of the questionnaires and the start of the second mailing.

The close-off date for coding returned completed questionnaires was set at June 15, 1980. By this date, a total of 20,108 questionnaires had been received which could be included in the data base. Another 1,705 had been received but were either very incomplete, were returned blank, or were returned as "no longer at that address" or "no such address".

4.4 Analysis Of Returns

The 20,108 completed questionnaires represent an overall rate of return of 56.7% based on the initial mailing of 35,441 questionnaires. At the start of the project, it had been estimated that the universe of 1979 Spring graduates was approximately 40,000. From this universe, it was hoped that 25,000 completed questionnaires could be obtained (an anticipated return rate of 62.5%). In the original proposal it was projected that a return rate of between 50 and 55% should be expected from a strategy of an initial mailing of the questionnaire followed by a reminder card and a second mailing of the questionnaire. The actual rate of return fell between these limits.

Of the 35,441 initial names provided for the mailing, 1,787 questionnaires were either returned after the cut-off date or were returned by the post office as being "undeliverable" or "not at that address". This number excludes any statistics for four of the universities which conducted their own mailing since data on the number of pieces of mail returned to them as undeliverable was not available. The 1,787 questionnaires which were returned to the original point of mailing represents 5.0% of the initial sample.

A summary of the returns received by institution is presented in Table 25. As can be noted, the returns as a percentage of the initial mailing vary from a low of 39.9% from graduates of the Ontario College of Art to a high of 62.6% for graduates from the University of Guelph. As indicated earlier, the average rate of return was 56.7%. If the questionnaires which were undelivered, or returned by the post office, or which were completed but arrived too late for inclusion in the data base are deducted from the initial mailing, the response return increases to 59.7%.

TABLE 25

SUMMARY OF RETURNS BY INSTITUTION

INSTITUTION	INITIAL MAILING	UNDELIVERED/ LATE RETURNS/ PROBLEMS	MAILING LESS UNDELIVERED/ LATE RETURNS & PROBLEMS	TOTAL RETURNS	RETURNS OF A % OF	
					INITIAL MAILING	REVISED MAILING
McMASTER	2,309	31 ⁴	2,278	1,317	57.0%	57.8%
QUEEN'S	2,589	148	2,441	1,545	59.6	61.1
WESTERN	3,872	10 ⁴	3,862	2,145	55.4	55.5
WILFRID LAURIER	1,051	2 ⁴	1,049	649	61.8	61.9
WATERLOO	2,793 ¹	53 ⁴	2,740	1,490	53.3	54.4
BROCK	972	59	913	585	60.2	64.1
CARLETON	1,376	116	1,260	780	56.7	61.9
GUELPH	1,601	52	1,549	1,002	62.6	64.7
LAKEHEAD	750 ²	57	693	453	60.4	65.4
LAURENTIAN	776	135	641	427	55.0	66.6
O.C.A.	223	19	204	89	39.9	43.6
OTTAWA	2,650	222	2,428	1,316	49.7	54.2
RYERSON	1,819	95	1,724	980	53.9	56.8
TORONTO	7,687	392	7,295	4,464	58.1	61.2
TRENT	570	34	536	345	60.5	64.4
WINDSOR	1,614	130	1,484	901	55.8	60.7
YORK	2,789	228	2,561	1,543	55.3	60.2
NOT IDENTIFIED ³	N.A.	N.A.	N.A.	77	N.A.	N.A.
TOTAL	35,441	1,787 ⁵	33,663	20,108	56.7%	59.7%

N.A. not applicable

N/A not available

1. estimate from total 1979 graduates.

2. estimate from number of labels supplied.

3. institution could not be determined from the return.

4. excludes undelivered mail.

5. of this total, 193 were received after the deadline and could not be coded.

5.0 CODING AND EDITING

As each completed questionnaire was received, the respondent number was first checked against the master control list and the appropriate university code added to the questionnaire. At the same time, the name on the master control list was checked to indicate that a completed questionnaire had been received and booked for that respondent. The name of the respondent was then located in a secondary control file and the mailing label removed and attached to the questionnaire.

Next, the appropriate USIS code was determined based on the degree/diploma received and the major field of study. With this information, the questionnaire was then booked into the Field Management System. The purpose of this system was to record returns by university and field of study (USIS code). Using this system the returns could be monitored against the distribution of the original universe.

The questionnaire was designed to minimize the number of open-ended questions (i.e. a question where the respondent must write in the answer). Wherever possible pre-coded lists were set out for each question and the graduate was asked to indicate the most appropriate response. In some cases the respondent was asked to rank order any answers which were applicable.

The next step in the coding process was to review the completed questionnaire and set out in the margins the appropriate code for each of the pre-coded questions. At the same time, the responses were checked for logical consistency. For example, if a graduate indicated that their present status was "unemployed" then this response should also be indicated in the question on current salary.

Once all pre-coded questions had been dealt with, those questions for which written answers were provided were reviewed. The written responses from approximately 2,000 of the initial questionnaires received were hand tabulated. From this tabulation, several answers which appeared with some regularity were identified and new codes assigned. These codes were then transferred to the questionnaire in the appropriate locations. Any responses for which codes still had not been assigned were put to the side. Once all questionnaires had been coded as completely as possible, all questionnaires which still contained missing codes were dealt with. In some cases, additional codes were assigned based on the number of responses in these remaining questionnaires. When the frequency for any particular response which still had not been coded had been reduced to a minimum level, it was assigned to a category labelled as "other". In the code book accompanying this report, all responses which are grouped into an "other" category for any question are listed so that none of the information collected is lost.

As questionnaires were completed in the coding phase, approximately 15 to 20 percent were drawn at random for verification by the supervisor. Any inaccuracies which were revealed were pointed out to the coding staff and corrective action taken.

Following this verification process, the coded questionnaires were sent to be keypunched and keyverified. During this process, all questionnaires were 100% keyverified. Keypunching was done directly onto tape in batches of 1,000. As each batch was completed, it was turned over to data processing to be cleaned and transferred to a master file.

6.0 DATA PROCESSING

The first step in the processing of the completed questionnaires was the writing of an error program which would check both for consistency of logic throughout the questionnaire and that any response in a single question matched one of the codes assigned. For example, the respondent number was checked against the university code using the original master list of respondent numbers assigned to each university. Graduates who indicated that they were presently unemployed were checked to make sure that responses were not given to those questions on the present employment status. The tests which were written for each question can be summarized as follows:

- *ensure that all respondents who are qualified to answer the question do in fact have a response.*
- *check that all respondents who are not qualified to answer the question have a blank in the appropriate spaces.*
- *check that all qualified responses match one of the codes assigned to that question.*

For the most part, the questionnaires were very well completed. Most of the respondents were able to follow the instructions as indicated on the questionnaire.

As each batch of data from 1,000 respondents was cleaned and verified, it was written in a master file. Once all records for the 20,108 respondents had been cleaned, a final frequency run was produced for each variable. This frequency was reviewed for consistency of bases from one question to the next and also that all codes matched legitimate, acceptable responses. Once this step had been completed the file was ready for processing.

A set of tabulations was defined by the Ministry. Based on these specifications a sketch of how each table would appear was prepared. These tables were then reviewed with the representatives from the universities. In several cases, this group made recommendations to alter the tabulations specifications slightly in order to gain more information for their use. The university representatives also requested additional tables to those which had been defined by the Ministry. Wherever possible, these additional tables were added to the specifications.

A computer program was then written using the SPSS language. This computer program which was used to generate the tables is being delivered to the Ministry, together with the raw data file. Each university in Ontario is also receiving a copy of this program together with its own data file. This will allow both the Ministry and the universities to process additional tables.

The final step was to determine the weighting factors which would be applied to the data. Weighting factors are required because the responses received may not be completely representative of the original universe. For example, rates of return were not equal for all programs or institutions. To analyse the data in its raw form would introduce potential bias in several areas. For example, the rate of return for graduates receiving baccalaureate degrees was different from those receiving masters or PhD level degrees. If the data base was not weighted, responses from one of these categories would be overstated while the other would be understated.

Initially, it had been hoped that the weighting would be based on three variables:

- *institution*
- *field of study*
- *level of qualification*

The data collected for each graduate would have resulted in a weighting table with over 10,000 elements. Obviously, with a population of 20,000 respondents such a detailed weighting structure would have been ludicrous, even recognizing that many of the elements in the weighting matrix would have been zero.

The logic required in the construction of all compound variables used in the analyses is also detailed in the code book. Following the processing of the tabulations and the preparation of all documentation, the files used in the analyses were transferred to the Ministry of Colleges and Universities. These files included:

- *the raw data file.*
- *program to process the tabulations, including logic constructs and labels.*
- *the SPSS save file (this file permits more economical processing of tabulations than using the original data file).*

Each institution also received several files and documentation including,

- *raw data file on tape for the institution.*
- *dump of the first and last 10 records on the tape.*
- *frequency run for all raw variables.*
- *program used to process the provincial tabulations; including logic constructs and labels.*
- *code book.*

and the number of responses received from that institution. Should future analyses require a base of the initial population this can be achieved by simply applying the second weighting factor.

The tables requested by the Ministry were processed using the weighting factors which have been described above. These tables were booked and delivered to the Ministry under separate cover. A complete description of the present data file and a manual describing how to access and use the information contained on that file has been documented and provided in a separate volume to this report.

Many of the tables which were delivered to the Ministry are based not upon the raw variables but on combinations. For example, a present employment status is derived from at least six sources including,

- *whether or not presently employed.*
- *if not employed, whether or not seeking employment.*
- *if not employed, whether has ever been employed.*
- *present student status (i.e. full-time or part-time).*
- *if presently enrolled in continuing education, what degree level and field of study.*

7.0 INTERPRETATION AND RELIABILITY OF RESULTS

Results from a sample of 20,108 are accurate to within $\pm 0.5\%$ at the 95% confidence level. Results could be biased by non-response. However, the high return rate would reduce this risk of bias. Two distributions would tend to confirm this conclusion. Firstly, the distribution of returns is similar among all institutions (with the exception of the Ontario College of Art) - Table 25. Secondly, the distribution of returns by level of qualification is very similar to the distribution of the original mailing (Table 26). To compare the distributions, it was necessary to exclude Waterloo, Brock and Lakehead from the analysis since data on the original universe was not available.

When analyzing sub-samples of the survey, the standard error of the proportion increases. The standard error of a proportion can be calculated using the following formula, provided that the proportion is not close to 0 or 1;

$$e = \pm \frac{P(1-P)}{n}$$

where, p = proportion

n = sample size

e = standard error

TABLE 26

COMPARISON OF RETURNS WITH ORIGINAL
UNIVERSE BY LEVEL OF QUALIFICATION

LEVEL OF QUALIFICATION	ORIGINAL MAILING*	COMPLETED RETURNS*
BACCALAUREATE	75.4%	77.0%
1ST PROFESSIONAL	4.4	5.6
MASTER'S	10.5	10.6
PhD	1.3	1.2
DIPLOMA*CERTIFICATE	8.0	5.6
OTHER	0.4	**

* excluding Waterloo, Brock and Lakehead.

** less than 0.5%

Then, the following confidence interval can be constructed for the estimated proportion (at the 95% confidence level):

$$P \pm 1.96 \sqrt{\frac{P(1-P)}{n}}$$

At the 90% confidence interval, the factor 1.96 is replaced by 1.65; at 98% the factor becomes 2.33 and at 99% 2.38. The following example from one of the previous analyses will serve to show how this formula can be applied.

In Table 11, it was shown that only 70.4% of PhD graduates have remained in Canada. How reliable is this estimate at the 95% confidence interval? Inserting the respective value into the formula, the following interval is calculated for this statistic:

$$0.704 \pm 1.96 \sqrt{\frac{0.704(1-0.704)}{228}}$$

$$0.704 \pm 1.96 \times 0.0302$$

$$0.704 \pm 0.059$$

$$70.4\% \pm 5.9\%$$

In other words, at the 95% confidence level, the proportion of PhD graduates remaining in Canada is between 64.5% and 76.3%. The standard

error (in the previous example - 5.9%) is dependent on the value of n , in this case the sub-sample size. If the sample size had been increased by 50% to 342, the standard error would be reduced to 4.8%.

For reference, a tabulation of the standard error at the 95% confidence level by sample size and estimated proportion is presented in Table 27.

TABLE 27
ESTIMATED STANDARD ERROR BY
SAMPLE SIZE AND ESTIMATED PROPORTION
(at the 95% confidence level)

<u>ESTIMATED PROPORTION</u>	<u>SAMPLE SIZE</u>							
	<u>1200</u>	<u>1000</u>	<u>800</u>	<u>600</u>	<u>400</u>	<u>200</u>	<u>100</u>	<u>50</u>
5	1.2	1.3	1.5	1.7	2.1	3.0	*	*
10	1.7	1.9	2.1	2.5	3.0	4.2	6.0	*
20	2.3	2.5	2.8	3.3	4.0	5.7	8.0	*
30	2.6	2.9	3.2	3.8	4.6	6.5	9.2	12.8
40	2.8	3.1	3.5	4.0	4.9	6.9	9.8	13.7
50	2.9	3.2	3.6	4.1	5.0	7.1	10.0	14.0
60	2.8	3.1	3.5	4.0	4.9	6.9	9.8	13.7
70	2.6	2.9	3.2	3.8	4.6	6.5	9.2	12.8
80	2.3	2.5	2.8	3.3	4.0	5.7	8.0	*
90	1.7	1.9	2.1	2.5	3.0	4.2	6.0	*
95	1.2	1.3	1.5	1.7	2.1	3.0	*	*

* Approximations cannot be made.

APPENDIX A

RESEARCH OBJECTIVES

OBJECTIVES

RELATED QUESTIONS

- | | |
|--|--|
| (a) to determine the status of university graduates during a given period within a year after graduation, i.e., labour force status or educational status, full-time or part-time; | 5,7,8,11,12,13a,13b,13c |
| (b) to determine the activities of the graduates between graduation and the date of the survey; | 5,7,8,11,12,13a,13b,13c, 14a,14b,17,20,25,26 |
| (c) to determine the length of time between graduation, first employment and/or current employment; | 1,20,26 |
| (d) to determine the approach and methods used to obtain employment as well as success rate, intensity and duration of the search; | 15,18,19a,19b |
| (e) to obtain a description of the first and/or current employment, including level of responsibility, sector of activity, employer location and salary; | 22a to 22h, 28a to 28h |
| (f) to determine the relationship between the job requirements and the level of qualification; | 33,34 |

OBJECTIVES

RELEVANT QUESTIONS

- | | |
|---|--------------------------------|
| (g) to determine the relationship between the job and the field of study at the university; | 33 |
| (h) to determine the relations between the graduates' expectations, their present situation and future prospects; | 31,32,33 |
| (i) to determine the influence and value of employment and other experiences before graduation on the present labour force status of the graduates; | 35,36,37 |
| (j) to determine the reasons behind the decision of graduates to further their studies rather than seek employment/ | 10 |
| (k) each type of information should be based on sex, discipline, level of qualification, institution, grade point average; | Respondent number, 2,3a, 3b,38 |

APPENDIX B

UNIVERSITY REPRESENTATIVES
&
SCHEDULE OF PROJECT
REVIEW MEETINGS

UNIVERSITY REPRESENTATIVES

- P. GRAHAM, University of Waterloo
- L. HOFFMAN, University of Toronto
- J. KELLY, Queen's University
- M. MILLAR, Wilfrid Laurier University
- A. SCHEID, University of Western Ontario
- W. WILKINSON, McMaster University
- L. HEYWOOD, University of Guelph
- L. PAYTON, Council of Ontario Universities

PROJECT REVIEW MEETINGS

DATE

OCTOBER 3, 1979

OCTOBER 12, 1979

NOVEMBER 13, 1979

DECEMBER 3, 1979

DECEMBER 14, 1979

DECEMBER 28, 1979

FEBRUARY 4, 1980

FEBRUARY 27, 1980

• MARCH 6, 1980

APRIL 22, 1980

JUNE 27, 1980

AUGUST 28, 1980

APPENDIX C

QUESTIONNAIRE

(English & French)

INSTRUCTIONS

Please read the instructions for each question carefully and indicate your response using either of the following marks ☐ or ☒ where applicable. In some questions, you will be asked to rank all of the responses which apply to you. For these questions, please indicate the ranking using 1, 2, 3, etc. If you find that none of the

responses applies to you, please write in your answer near the question. If a write-in response is required, please print to ensure that your answer is legible. Please be careful to follow instructions in the questionnaire and complete only those questions which apply to you.

PLEASE NOTE: If required, this questionnaire is also available in French.

SECTION A

To be completed by all respondents

- 1a) When did you complete the requirements for your most recent degree or diploma? (PLEASE INDICATE BOTH YEAR AND MONTH)

YEAR: 19 MONTH: 9-12

- 1b) And, when did you receive this degree or diploma (i.e. what was your convocation date)? (PLEASE INDICATE BOTH YEAR AND MONTH)

YEAR: 19 MONTH: 13-16

2. What level of degree or diploma did you receive? 17-18
(CHECK ONE BOX ONLY)

- ☐ Bachelor's - 3 yr.
☐ Bachelor's - 4 yr (including 4 year B.Ed.)
☐ B.Ed. (1 year only)
☐ M.D./D.D.S./L.L.B./L.L.L./O.D./D.V.M./M.DIV.
☐ Master's (excluding M.DIV.)
☐ PhD
☐ Diploma/Certificate
☐ Other (PLEASE SPECIFY: _____)

- 3a) Please describe the degree or diploma which you received. (e.g. Master of Applied Science, Bachelor of Education, Bachelor of Commerce). (PLEASE BE AS COMPLETE AS POSSIBLE). 19-21

DEGREE/
DIPLOMA: _____

- 3b) What was your major field of study? Please provide as much information as possible (e.g. Civil Engineering rather than just Engineering or Slavic Languages rather than Languages). If more than one major, please describe both.

FIELD(S) 1. _____
OF
STUDY 2. _____

- 4a) Did you graduate from . . . (CHECK ONE BOX ONLY) 22
☐ a regular program?
☐ a co-op program?

- 4b) During your most recent degree or diploma program, were you enrolled as . . . (PLEASE CHECK ONE BOX ONLY) 23
☐ a full-time student only?
☐ a part-time/extension student only?
☐ both a full-time and part-time/extension student?
☐ other? (PLEASE SPECIFY: _____)

- 4c) Do you hold any other post-secondary degrees? 24
☐ Yes ☐ No
(PLEASE LIST: _____)

5. Are you currently enrolled in a post-secondary education course or program, a post-doctoral program, or a program or course leading to professional certification? 25

☐ Yes → Go to Question 6, Section B

☐ No → Go to Question 11, Section C

SECTION B

To be completed only by those currently enrolled in a post-secondary education course or program, a post-doctoral program, or a program or course leading to professional certification.

6. In which of the following post-secondary courses or programs, are you enrolled? (PLEASE CHECK ONE BOX ONLY) 26-27

- ☐ General interest course (non-degree/non-diploma)
☐ Polytechnical Program
☐ Community College/Trade School Program
☐ Undergraduate (including make-up year)
☐ Professional Certification
☐ Teacher Education
☐ M.D./D.D.S./L.L.B./L.L.L./O.D./D.V.M./D.DIV.
☐ Graduate (excluding M.DIV.)
☐ Post-doctoral
☐ Other (PLEASE SPECIFY: _____)

7. In which type of program are you currently enrolled? 28
☐ Regular program
☐ Co-op program
☐ Not applicable

8. Are you currently enrolled as a . . . (PLEASE CHECK ONE BOX ONLY) 29
☐ full-time student?
☐ part-time/extension student?
☐ correspondent student?

- 9a) Please describe the degree, diploma, or certificate program in which you are currently enrolled, if applicable (e.g. Bachelor of Education, Master of Science, PhD, Diploma in Business Administration). (PLEASE BE AS COMPLETE AS POSSIBLE) 30-32

DEGREE/
DIPLOMA/
CERTIFICATE: _____

- 9b) What is your major field of study? Please provide as much information as possible (e.g. High Energy Physics, Molecular Biology, Journalism, Auto Mechanics).

FIELD OF STUDY
OR COURSE: _____

10. Please indicate the ONE statement that best describes why you decided to continue your education? (IF MORE THAN ONE STATEMENT APPLIES, PLEASE INDICATE THE RANKING, i.e. 1st, 2nd, 3rd, etc.. 'N BOXES PROVIDED.) 33-34

- ☐ Further education required for desired employment
☐ Wished to study further in a specific field
☐ Lack of suitable employment opportunities
☐ Enjoy attending school
☐ Encouraged by others to continue studies
☐ General interest
☐ Other (PLEASE SPECIFY: _____)

Please continue with Question 11
Section C

SECTION C

To be completed by all respondents

11. Are you currently . . . (PLEASE CHECK ONE BOX ONLY)

- ☐ employed on a full-time basis?
(30 hours or more per week)
- ☐ employed on a part-time basis?
- ☐ not employed but waiting for
job to start or awaiting recall?

Go to
Question 14a

☐ not employed?

Continue with
Question 12

12. Have you ever been employed since completing the requirements for your most recent degree or diploma?

☐ Yes

Go to Question 14a

☐ No

Continue with Question 13a

13a) Are you currently looking for employment?

☐ Yes

Go to Question 15

☐ No

Continue with Question 13b

13b) Have you ever looked for employment since completing the requirements for your most recent degree or diploma?

☐ Yes

Go to Question 15

☐ No

Continue with Question 13c

13c) For what reasons have you not looked for employment since completion of your most recent degree or diploma?
(PLEASE CHECK THE MOST APPROPRIATE BOX)

☐ Further education

☐ Health reasons

☐ Other (PLEASE SPECIFY: _____)

☐ Travel

☐ Housework

If you have not looked for employment since completing the
requirements for your most recent degree or diploma, go to Question 35, Section E.

14a) Are you currently looking for employment or another job?

☐ Yes

Go to Question 15

☐ No

Continue with Question 14b

14b) Did you look for employment since starting the program from which you received your most recent degree or diploma?

☐ Yes

Continue with Question 15

☐ No

Go to Question 20

15. When looking for employment, several sources are available for assistance. Some of the most frequently used sources are listed in the table below. Please complete the following questions for each source.

RATING SCALE 1 - Very Useful 2 - Quite Useful 3 - Not Very Useful 4 - Not at all Useful	15a		15b	15c	15d	
	YES	NO	PLEASE INDICATE WHETHER OR NOT YOU USED EACH SOURCE IN YOUR SEARCH FOR EMPLOYMENT.	PLEASE INDICATE HOW USEFUL THE SOURCE WAS IN PROVIDING INFORMATION FOR THE JOB SEARCH. RATE EACH SOURCE USED IN THE BOX PROVIDED ACCORDING TO THE RATING SCALE TO THE LEFT.	USING THE SAME SCALE, PLEASE RATE HOW USEFUL EACH SOURCE USED WAS IN OBTAINING JOB INTERVIEWS.	AND FINALLY, DID AT LEAST ONE JOB OFFER RESULT FROM EACH SOURCE WHICH WAS USED?
				RATING	RATING	YES NO
Private Employment Agencies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Canada Manpower Centres	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
University or Institution Career Counselling or Career Information Centres	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
On Campus Recruiting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
University or Institution Placement Centres	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Co-op or Field Employment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Newspaper Advertisements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Friends or relatives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Letters to employers who had not advertised job openings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
In-person visits to potential employers not advertising job openings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Professors/academic departments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Former employers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Professional associations or unions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Other (PLEASE SPECIFY: _____)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>

16. For each of the following, please indicate the extent to which you could have used additional assistance in your job search. (PLEASE CHECK ONE BOX ONLY FOR EACH STATEMENT).

	MUCH MORE ASSISTANCE	SOME MORE ASSISTANCE	NO MORE ASSISTANCE	NO ASSISTANCE WAS REQUIRED
a) Career counselling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Preparing resumes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Interview skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Job search techniques (i.e. where and how to look for job opportunities)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Actual job leads (i.e. company names and addresses)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

17. Please indicate when you began to search for your first employment after completing the requirements for your most recent degree or diploma. (If you began your search before completing the requirements, please still record the year and month when you began your search.) (PLEASE INDICATE BOTH YEAR AND MONTH)

YEAR: 19 MONTH: 44-47

18. Approximately how many initial contacts with different potential employers (either by phone, mail or in person) did you make from the time you started your job search until you accepted your first job? (If you have not found employment since graduation, please indicate total number of contacts until present time.)

NUMBER OF INITIAL CONTACTS 48-50

- 19a) Approximately how many job interviews did these contacts generate?

NUMBER OF INTERVIEWS 51-52

- 19b) How many actual job offers did you receive?

NUMBER OF JOB OFFERS 53-54

If you have not been employed, either full-time or part-time, since completing the requirements for your most recent degree or diploma, please go to Question 35, Section E.

SECTION D

To be completed only by those currently employed, or those who have held at least one job, either full-time or part-time, since completing the requirements for their most recent degree or diploma.

If more than one job was held at the same time, please complete for the job which occupied the most time per week.

20. When did you (or will you) start your first job after completing the requirements for your most recent degree or diploma? (PLEASE RECORD YEAR AND MONTH) If the job was obtained or started before completing the degree or diploma requirements, please still record the year and month the job was first started.

YEAR: 19 MONTH: 55-58

21. What was the primary reason for accepting your first job since completion of the requirements for your most recent degree or diploma? (IF MORE THAN ONE REASON APPLIES, PLEASE INDICATE RANKING, i.e., 1st, 2nd, 3rd, IN BOXES)

- ☐ Acceptable/good salary
☐ Near place of residence/good location
☐ Interesting work
☐ Good opportunity for advancement
☐ Provides stable/secure future
☐ Financially sound organization
☐ Relates to my academic background
☐ Only employment opportunity available
☐ Matched my career objectives
☐ Required creative talents
☐ Intellectually challenging/stimulating
☐ To accompany spouse
☐ Other (PLEASE SPECIFY: _____)

22. Please describe the details of your first job since completing the requirements for your most recent degree or diploma according to the specifications outlined below. (IT IS IMPORTANT TO BE AS DETAILED AS POSSIBLE)

a) JOB TITLE: (e.g. Systems Analyst, Certified Industrial Accountant, Civil Engineer, Advertising Salesman)

b) What TYPE OF WORK do, or did, you do? (e.g. Insurance Sales, Data Processing, Landscape Architecture)

c) NAME OF ORGANIZATION?
(If self-employed, please indicate)

d) CITY:

e) PROVINCE/STATE:

f) COUNTRY: (if outside Canada)

g) What kind of business, industry or service is this organization? (e.g. iron ore mining, actuarial consulting, wholesale grocery, general insurance agency, retail book store). (IT IS IMPORTANT TO BE AS DETAILED AS POSSIBLE)

h) EMPLOYMENT STATUS (with this organization): 75
☐ Full-time (30 hrs. or more per week)
☐ Part-time

23. Did you work full-time for this employer before beginning, or during, your most recent degree or diploma program? 76

- ☐ Yes
☐ Yes, as a co-op student
☐ Yes, in field placement or internship
☐ No

24. And what was your approximate starting salary? (if self-employed, please indicate anticipated yearly income). (PLEASE CHECK ONE BOX ONLY) 77-78

- | | |
|--|--|
| <input type="checkbox"/> Less than \$6,000 per annum | <input type="checkbox"/> \$20,000 to \$21,999 p.a. |
| <input type="checkbox"/> \$ 6,000 to \$ 7,999 p.a. | <input type="checkbox"/> \$22,000 to \$23,999 p.a. |
| <input type="checkbox"/> \$ 8,000 to \$ 9,999 p.a. | <input type="checkbox"/> \$24,000 to \$25,999 p.a. |
| <input type="checkbox"/> \$10,000 to \$11,999 p.a. | <input type="checkbox"/> \$26,000 to \$27,999 p.a. |
| <input type="checkbox"/> \$12,000 to \$13,999 p.a. | <input type="checkbox"/> \$28,000 to \$29,999 p.a. |
| <input type="checkbox"/> \$14,000 to \$15,999 p.a. | <input type="checkbox"/> \$30,000 to \$34,999 p.a. |
| <input type="checkbox"/> \$16,000 to \$17,999 p.a. | <input type="checkbox"/> \$35,000 to \$39,999 p.a. |
| <input type="checkbox"/> \$18,000 to \$19,999 p.a. | <input type="checkbox"/> \$40,000 or more p.a. |

25. Have you changed jobs (i.e. type of work) since completing the requirements for your most recent degree or diploma? 79

- ☐ Yes (my current job is different from my first job since completing degree/diploma requirements)
☐ No (my current job is my first job since completing degree/diploma requirements)
☐ Currently not employed

Continue with Question 26

Go to Question 30

26. When did you start your current job? (PLEASE INDICATE BOTH YEAR AND MONTH) 80-83

YEAR: 19 MONTH: 7-10

27. Did you work full-time for this employer before starting, or during, your most recent degree or diploma program? 11

- ☐ Yes
☐ Yes, as a co-op student
☐ Yes, in field placement or internship
☐ No

28. Now please describe the details of your current job according to the specifications outlined below. (IT IS IMPORTANT TO BE AS DETAILED AS POSSIBLE)

a) JOB TITLE: (e.g. Systems Analyst, Certified Industrial Accountant, Civil Engineer, Advertising Salesman)

b) What TYPE OF WORK do you do? (e.g. Insurance Sales, Data Processing, Landscape Architecture)

c) NAME OF ORGANIZATION? (if self-employed, please indicate)

d) CITY:

e) PROVINCE/STATE:

f) COUNTRY: (if outside Canada)

g) What kind of business, industry or service is this organization? (e.g. iron ore mining, actuarial consulting, wholesale grocery, general insurance agency, retail book store). (IT IS IMPORTANT TO BE AS DETAILED AS POSSIBLE)

h) EMPLOYMENT STATUS (with this organization):

Full-time (30 hrs. or more per week)

Part-time

29. What was the primary reason for changing employment? (IF MORE THAN ONE STATEMENT APPLIES, PLEASE INDICATE RANKING, i.e. 1st, 2nd, etc., IN BOXES PROVIDED)

Wanted a job in my field of study

Changed my career objectives/goals

Wanted to change location

Better salary

More appropriate for my career objectives

Better opportunity for advancement

Disliked/disillusioned with previous employment

More challenging/stimulating employment

To accompany spouse

Other (PLEASE SPECIFY:)

30. If currently employed, please indicate your approximate current salary. (PLEASE CHECK ONE BOX ONLY)

Currently not employed

Less than \$6000 per annum

\$ 6,000 to \$ 7,999 p.a.

\$ 8,000 to \$ 9,999 p.a.

\$10,000 to \$11,999 p.a.

\$12,000 to \$13,999 p.a.

\$14,000 to \$15,999 p.a.

\$16,000 to \$17,999 p.a.

\$18,000 to \$19,999 p.a.

\$20,000 to \$21,999 p.a.

\$22,000 to \$23,999 p.a.

\$24,000 to \$25,999 p.a.

\$26,000 to \$27,999 p.a.

\$28,000 to \$29,999 p.a.

\$30,000 to \$34,999 p.a.

\$35,000 to \$39,999 p.a.

\$40,000 or more p.a.

31. Thinking of your most recent job, how satisfied are, (or were) you with the following? (PLEASE CHECK ONE BOX ONLY FOR EACH STATEMENT)

VERY SATISFIED

QUITE SATISFIED

NOT VERY SATISFIED

NOT AT ALL SATISFIED

a) salary

b) opportunity for advancement

c) opportunity for personal initiative

32. Still thinking of your most recent job, please indicate the extent to which you agree with the following statements. (PLEASE CHECK ONE BOX ONLY FOR EACH STATEMENT)

STRONGLY AGREE

AGREE

DISAGREE

STRONGLY DISAGREE

a) The job matched my expectations at the time it was offered

b) The job is in the field I wanted

c) The job could have been performed without the degree/or diploma most recently received

33. How related is your most recent job to the field of study of your most recent degree or diploma.

VERY RELATED

SOMEWHAT RELATED

NOT VERY RELATED

NOT AT ALL RELATED

34. Was a degree or diploma specified by your employer as a requirement for your most recent job?

Yes (PLEASE SPECIFY DEGREE REQUIRED:)

No

SECTION E

To be answered by all respondents

35. In approximately how many organizations or sports did you participate during your post-secondary education?

NUMBER

36. Overall, would you classify your involvement in these activities as a . . . (PLEASE CHECK ONE BOX ONLY)

leadership role?

participatory role?

not applicable

37. Please record total work experience since completing your secondary school education, or equivalent, for each of the following categories. (PLEASE RECORD IN MONTHS)

a) Summer jobs - full-time (30 hrs. or more per week)

b) Part-time (less than 30 hrs./wk)

c) Full-time (excluding summer)

d) Co-op, Field Placement or Internship

38. Please indicate:

a) Year of birth:

b) Sex:

THANK YOU

DIRECTIVES

Veuillez lire attentivement les directives s'appliquant à chaque question et indiquer vos réponses en traçant un ☒ ou ☒ dans la ou les case(s) appropriée(s). Il se peut que pour certaines questions vous deviez classer par ordre d'importance toutes les réponses qui s'appliquent à votre cas. Si aucune des réponses données ne s'ap-

plique, veuillez écrire votre réponse près de la question. Si vous écrivez une réponse, veuillez l'écrire en lettres moulées, pour qu'elle soit lisible. Veuillez suivre exactement les directives du questionnaire et remplir uniquement les questions qui s'appliquent à votre cas.

SECTION A

Cette section doit être remplie par
tous les répondants

- 1a) Quand avez-vous satisfait aux conditions requises pour l'obtention du plus récent grade ou diplôme que vous avez reçu? (VEUILLEZ INDIQUER L'ANNÉE ET LE MOIS)

ANNÉE: 19 MOIS: 9-12

- 1b) Et quand avez-vous reçu ce grade ou diplôme, c'est-à-dire, quelle a été la date de remise de votre diplôme? (VEUILLEZ INDIQUER L'ANNÉE ET LE MOIS)

ANNÉE: 19 MOIS: 13-16

2. Quel grade ou diplôme avez-vous reçu? (NE COCHEZ QU'UNE SEULE CASE) 17-18

- ☐ Baccalauréat général
☐ Baccalauréat spécialisé (comprend le B.Ed. de 4 ans)
☐ B.Ed. (1 an seulement)
☐ M.D./D.D.S./L.L.B./L.L.L./O.D./D.V.M./M.DIV.
☐ Maîtrise (sauf M.DIV.)
☐ Doctorat
☐ Diplôme/Certificat
☐ Autre (VEUILLEZ PRÉCISER: _____)

- 3a) Veuillez décrire le grade ou diplôme que vous avez reçu. (ex.: Maîtrise en sciences appliquées, baccalauréat en éducation, baccalauréat en commerce). (SOYEZ LE PLUS PRÉCIS POSSIBLE) 19-21

GRADE/
DIPLOME _____

- 3b) Quel était votre principal domaine d'études? Si vous aviez deux disciplines majeures, veuillez indiquer ces deux domaines d'études. Soyez le plus précis possible (ex.: en écrivant génie civil plutôt que simplement génie ou langues slaves plutôt que langues). Si vous aviez plus d'un domaine d'études principaux décrivez les deux.

DOMAINES(S) 1. _____
D'ETUDES 2. _____

- 4a) Étiez-vous inscrit à... (NE COCHEZ QU'UNE SEULE CASE) 22

- ☐ un programme régulier?
☐ un programme d'éducation coopérative?

- 4b) Quel était votre statut d'étudiant au cours du programme menant à votre grade ou diplôme le plus récent? (NE COCHEZ QU'UNE SEULE CASE) 23

- ☐ étudiant à temps plein seulement?
☐ étudiant à temps partiel ou du programme d'éducation permanente seulement?
☐ les deux: étudiant à temps plein et étudiant à temps partiel ou du programme d'éducation permanente?
☐ autre? (VEUILLEZ PRÉCISER: _____)

- 4c) Avez-vous reçu d'autres grades ou diplômes d'études post-secondaires? 24

☐ Oui ☐ Non
(VEUILLEZ LES ENUMERER: _____)

5. Êtes-vous actuellement inscrit à un cours ou un programme d'études post-secondaires, un programme d'études au niveau post-doctoral ou un programme menant à un certificat professionnel? 25

- ☐ Oui → Passez à la Question 6, Section B
☐ Non → Passez à la Question 11, Section C

SECTION B

Cette section doit être remplie uniquement par
ceux qui sont actuellement inscrits à un cours
ou un programme d'études post-secondaires,
un programme d'études au niveau post-doctoral
ou un programme menant à un certificat profes-
sionnel.

6. Parmi les cours ou programmes d'études post-secondaires suivants, quel est celui auquel vous êtes inscrit? (NE COCHEZ QU'UNE SEULE CASE) 25-27

- ☐ Cours de formation générale (ne menant pas à un grade/diplôme)
☐ Formation polytechnique
☐ Collège Communautaire/Ecole de métiers
☐ 1er cycle (comprend l'année de rattrapage)
☐ Certificat professionnel
☐ Formation des Enseignants
☐ M.D./D.D.S./L.L.B./L.L.L./O.D./D.V.M./M.DIV.
☐ 2e ou 3e cycle (sauf M.DIV.)
☐ Etudes au niveau post-doctoral
☐ Autre (VEUILLEZ PRÉCISER: _____)

7. A quel type de programme êtes-vous actuellement inscrit? 28

- ☐ programme régulier
☐ programme d'éducation coopérative
☐ ne s'applique pas

8. Êtes-vous actuellement inscrit comme... (NE COCHEZ QU'UNE SEULE CASE) 29

- ☐ étudiant à temps plein?
☐ étudiant à temps partiel/du programme d'éducation permanente?
☐ étudiant d'un cours par correspondance?

- 9a) Veuillez décrire, s'il y a lieu, le programme menant à un grade, diplôme ou certificat auquel vous êtes actuellement inscrit. (par ex.: baccalauréat en éducation, maîtrise en sciences, doctorat, diplôme en administration des affaires). (SOYEZ LE PLUS PRÉCIS POSSIBLE) 30-32

GRADE/
DIPLOME/
CERTIFICAT: _____

- 9b) Quel est votre principal domaine d'études? Soyez le plus précis possible (par ex.: physique corpusculaire, biologie moléculaire, journalisme, mécanique automobile). 33-34

DOMAINE
D'ETUDES
OU COURS _____

10. Veuillez indiquer laquelle des raisons suivantes a le plus influencé votre décision de poursuivre vos études. (SI PLUS D'UNE RAISON S'APPLIQUE, VEUILLEZ INDIQUER L'ORDRE D'IMPORTANCE, c'est à dire 1ère, 2e, 3e etc., DANS LES CASES FOURNIES) 35-36

- ☐ Des études plus poussées étaient exigées pour l'emploi souhaité
☐ Désir d'étudier davantage dans un domaine précis
☐ Manque d'occasions d'emploi satisfaisantes
☐ Plaisir de faire des études
☐ Encouragé par d'autres à poursuivre mes études
☐ Formation générale
☐ Autre (VEUILLEZ PRÉCISER: _____)

Veuillez continuer en répondant à la Question 11
Section C

SECTION C

Cette section doit être remplie par tous les répondants

11. Etes-vous actuellement . . . (NE COCHEZ QU'UNE SEULE CASE)

☐ employé à temps plein?
(30 heures ou plus par semaine)

☐ employé à temps partiel?

☐ sans emploi mais vous attendez
que l'emploi commence ou un rappel?

Passez à la Question 14a

☐ sans emploi?

Continuez en répondant à la Question 12
12. Avez-vous travaillé après avoir satisfait aux conditions requises pour l'obtention de votre grade ou diplôme le plus récent?

☐ Oui

Passez à la Question 14a

☐ Non

Continuez en répondant à la Question 13a
- 13a) Etes-vous actuellement à la recherche d'un emploi?

☐ Oui

Passez à la Question 15

☐ Non

Continuez en répondant à la Question 13b
- 13b) Avez-vous cherché un emploi après avoir satisfait aux conditions requises pour l'obtention de votre grade ou diplôme le plus récent?

☐ Oui

Passez à la Question 15

☐ Non

Continuez en répondant à la Question 13c
- 13c) Pour quelle raison parmi les suivantes n'avez-vous pas cherché un emploi? (VEUILLEZ COCHER LA CASE S'APPLIQUANT LE MIEUX)

☐ Poursuite de mes études

☐ Santé

☐ Autre (VEUILLEZ PRECISER:

☐ Voyages

☐ Travail ménager
- Si vous n'avez pas cherché d'emploi après avoir satisfait aux conditions requises pour l'obtention de votre grade ou diplôme passez à la Question 35, Section E.
- 14a) Etes-vous actuellement à la recherche d'un emploi?

☐ Oui

Passez à la Question 15

☐ Non

Continuez en répondant à la Question 14b
- 14b) Avez-vous cherché un emploi après avoir commencé le programme menant à votre grade ou diplôme le plus récent?

☐ Oui

Continuez en répondant à la Question 15

☐ Non

Passez à la Question 20
15. On peut faire appel à un grand nombre de méthodes pour chercher un emploi. Celles auxquelles on fait appel le plus souvent sont énumérées ci-dessous. Veuillez répondre aux questions suivantes concernant chaque méthode.

ECHELLE D'EVALUATION	
1 - Très Utile	
2 - Assez Utile	
3 - Pas Très Utile	
4 - Pas Utile du Tout	

	15a		15b	15c	15d	
	Veuillez indiquer si vous avez fait appel ou non aux méthodes ci-dessous pour chercher un emploi.		Veuillez indiquer dans quelle mesure chaque méthode à laquelle vous avez fait appel a été une source utile de renseignements pour la recherche d'un emploi. Veuillez indiquer votre évaluation dans la case appropriée, à l'aide de l'échelle d'évaluation à gauche.	A l'aide de la même échelle, veuillez indiquer dans quelle mesure chaque méthode à laquelle vous avez fait appel a été un moyen utile pour obtenir des entrevues.	Et en dernier lieu, avez-vous reçu au moins une offre d'emploi pour chacune des méthodes aux quelles vous avez fait appel?	
	OUI	NON	EVALUATION	EVALUATION	OUI	NON
Agences de placement privées	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Centres de main-d'oeuvre de Canada	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Service d'orientation professionnelle d'universités ou d'établissements d'enseignement ou Centres d'information sur les carrières	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recrutement sur le campus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Services de placement de l'université ou de l'établissement d'enseignement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stage professionnel ou de programme coopératif	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Annonces de journaux	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Amis ou parents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lettres à des employeurs n'ayant pas annoncé d'offres d'emploi	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Visites rendues à des employeurs éventuels n'ayant pas annoncé d'offres d'emploi	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Professeurs/départements universitaires	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anciens employeurs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Associations professionnelles ou syndicats	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Autre (VEUILLEZ PRECISER: _____)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

16. Pour chacune des activités suivantes, veuillez indiquer dans quelle mesure vous auriez eu besoin d'une aide accrue pour la recherche d'un emploi. (NE COCHEZ QU'UNE SEULE CASE POUR CHAQUE ACTIVITE)

BEAUCOUP PLUS D'AIDE

UN PEU PLUS D'AIDE

PAS PLUS D'AIDE

AUCUNE AIDE REQUISE

a) Orientation professionnelle

b) Etablissement de curriculum vitae

c) Comportement durant les entrevues

d) Techniques de recherche d'emploi (où et comment découvrir les occasions d'emploi)

e) Nom et adresse de compagnies où s'adresser

☐

☐

☐

☐

☐

☐

☐

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17. Veuillez indiquer quand vous avez commencé à chercher votre premier emploi après avoir satisfait aux conditions requises pour l'obtention de votre grade ou diplôme le plus récent. (Si vous avez commencé à chercher un emploi avant de satisfaire aux conditions, veuillez quand même indiquer le mois et l'année où vous avez commencé à chercher). (VEUILLEZ INDIQUER L'ANNÉE ET LE MOIS)

ANNÉE: 19

MOIS:

44-47

18. Environ combien de premiers contacts avec différents employeurs éventuels (que ce soit par téléphone, correspondance ou en personne) avez-vous pris entre le moment où vous avez commencé à chercher un emploi et celui où vous avez accepté votre premier emploi? (Si vous n'avez pas travaillé depuis l'obtention de votre diplôme, veuillez inscrire le nombre total de contacts pris jusqu'à présent).

NOMBRE DE CONTACTS INITIAUX

48-50

- 19a) Environ combien d'entrevues ont résulté de ces contacts?

NOMBRE D'ENTREVUES

51-52

- 19b) Combien d'offres d'emploi avez-vous reçues?

NOMBRE D'OFFRES D'EMPLOI

53-54

Si vous n'avez pas travaillé, que ce soit à temps plein ou à temps partiel, après avoir satisfait aux conditions requises pour l'obtention de votre grade ou diplôme le plus récent, veuillez passer à la Question 35, Section E.

SECTION D

Cette section doit être remplie uniquement par ceux qui ont actuellement un emploi, ou par ceux qui ont déjà eu au moins un emploi, à temps plein ou partiel, après avoir satisfait aux conditions requises pour l'obtention de leur grade ou diplôme le plus récent.

Si vous avez occupé plus d'un emploi à la fois, veuillez répondre aux questions pour l'emploi auquel vous accordiez le plus de temps par semaine.

20. Quand avez-vous commencé (ou commencerez-vous) votre premier emploi après avoir satisfait aux conditions requises pour l'obtention de votre grade ou diplôme le plus récent? (VEUILLEZ INDIQUER L'ANNÉE ET LE MOIS) Si vous avez obtenu ou commencé cet emploi avant d'avoir satisfait aux conditions, veuillez quand même indiquer l'année et le mois du début de l'emploi.

ANNÉE: 19

MOIS:

55-58

21. Quelle était la principale raison pour laquelle vous avez accepté votre premier emploi après avoir satisfait aux conditions requises pour l'obtention de votre grade ou diplôme le plus récent? (SI PLUS D'UNE RAISON S'APPLIQUE, VEUILLEZ INDIQUER L'ORDRE D'IMPORTANCE, c'est-à-dire 1ère, 2e, 3e DANS LES CASES)

- ☐ Salaire satisfaisant/bon
☐ Près de chez moi/bien situé
☐ Travail intéressant
☐ Bonnes possibilités d'avancement professionnel
☐ Assure un avenir stable/sûr
☐ Entreprise de situation financière solide
☐ Correspond à mes études
☐ Seule offre d'emploi reçue
☐ Correspondait à ma carrière visée
☐ Demandait des aptitudes créatrices
☐ Travail enrichissant/stimulant
☐ Pour accompagner mon époux/épouse
☐ Autre (VEUILLEZ PRÉCISER: _____)

59-60
61-62
63-64

22. Veuillez décrire votre premier emploi après avoir satisfait aux conditions requises pour l'obtention de votre grade ou diplôme le plus récent, en indiquant les renseignements demandés ci-dessous. (IL EST IMPORTANT D'ÊTRE LE PLUS PRÉCIS POSSIBLE)

a) DÉSIGNATION DE L'EMPLOI (ex.: analyste de systèmes, comptable industriel agréé ingénieur civil, représentant en publicité)

b) Quel GENRE DE TRAVAIL faites-vous, ou faisiez-vous? (ex.: ventes d'assurances, traitement de données, architecture paysagiste)

c) NOM DE L'ENTREPRISE?
(si travailleur autonome, veuillez l'indiquer)

d) VILLE:

e) PROVINCE/ÉTAT:

65-68
69-71

f) PAYS: (si à l'extérieur du Canada)

g) De quel genre d'entreprise, d'industrie ou de service s'agit-il? (ex.: extraction de minéral de fer, actuaire conseil, grossiste en alimentation, société d'assurances, libraire-détaillant). (IL EST IMPORTANT D'ÊTRE LE PLUS PRÉCIS POSSIBLE)

72-74

h) STATUT PROFESSIONNEL (chez cet employeur):
☐ Temps plein (30 heures ou plus par semaine)
☐ Temps partiel

75

23. Avez-vous travaillé à temps plein pour cet employeur avant de commencer ou pendant le programme menant à votre grade ou diplôme le plus récent?

- ☐ Oui
☐ Oui, comme étudiant au programme d'éducation coopérative
☐ Oui, en stage professionnel ou internat
☐ Non

76

24. Et quel était votre salaire initial approximatif? (Si travailleur autonome, veuillez indiquer vos gains annuels prévus). (NE COCHEZ QU'UNE SEULE CASE)

- ☐ Moins de \$6,000 par année
☐ \$ 6,000 à \$ 7,999 par année
☐ \$ 8,000 à \$ 9,999 par année
☐ \$10,000 à \$11,999 par année
☐ \$12,000 à \$13,999 par année
☐ \$14,000 à \$15,999 par année
☐ \$16,000 à \$17,999 par année
☐ \$18,000 à \$19,999 par année
☐ \$20,000 à \$21,999 par année
☐ \$22,000 à \$23,999 par année
☐ \$24,000 à \$25,999 par année
☐ \$26,000 à \$27,999 par année
☐ \$28,000 à \$29,999 par année
☐ \$30,000 à \$34,999 par année
☐ \$35,000 à \$39,999 par année
☐ \$40,000 ou plus par année

77-78

25. Avez-vous changé d'emploi (c'est-à-dire de genre de travail) après avoir satisfait aux conditions requises pour l'obtention de votre grade ou diplôme le plus récent?

☐ Oui (mon emploi actuel est différent du premier emploi occupé après avoir satisfait aux conditions requises pour l'obtention du grade/diplôme)

Continuez en répondant à la Question 26

☐ Non (mon emploi actuel est mon premier emploi après avoir satisfait aux conditions requises pour l'obtention du grade/diplôme)

Passez à la Question 30

☐ Actuellement sans emploi

26. Depuis quand avez-vous votre emploi actuel? (VEUILLEZ INDIQUER L'ANNÉE ET LE MOIS)

ANNÉE: 19

MOIS:

79-80
81-82
83-84

27. Avez-vous travaillé à temps plein pour cet employeur avant de commencer ou pendant le programme menant à votre grade ou diplôme le plus récent?

- ☐ Oui
☐ Oui, comme étudiant au programme d'éducation coopérative
☐ Oui, en stage professionnel ou internat
☐ Non

85-88
89-91

28. Veuillez décrire votre emploi actuel, en indiquant les renseignements demandés ci-dessous. IL EST IMPORTANT D'ÊTRE LE PLUS PRÉCIS POSSIBLE:

a) DESIGNATION DE L'EMPLOI (ex.: analyste de systèmes, comptable industriel, ingénieur civil, représentant en publicité)

b) Quel GENRE DE TRAVAIL faites-vous? (ex.: ventes d'assurances, traitement de données, architecture paysagiste)

c) NOM DE L'ENTREPRISE? (si travailleur autonome, veuillez l'indiquer)

d) VILLE: e) PROVINCE/ÉTAT:

f) PAYS: (si à l'extérieur du Canada)

g) De quel genre d'entreprise, d'industrie ou de service s'agit-il? (ex.: extraction de minéraux, fer, actuaire conseil, grossiste en alimentation, société d'assurances, librairie-détaillant) IL EST IMPORTANT D'ÊTRE LE PLUS PRÉCIS POSSIBLE

h) STATUT PROFESSIONNEL (chez cet employeur): Temps plein (30 heures ou plus par semaine) Temps partiel

29. Quelle était la principale raison pour laquelle vous avez changé d'emploi? (SI PLUS D'UNE RAISON S'APPLIQUE, VEUILLEZ INDICER L'ORDRE D'IMPORTANCE, c'est-à-dire 1ère, 2e, 3e DANS LES CASES FOURNIES)

Souhaitais un emploi correspondant à mon domaine d'études

À la fin de ma carrière envisagée

Souhaitais changer de lieux de travail

Meilleur salaire

Repondait mieux à ma carrière visée

Meilleures possibilités d'avancement professionnel

Ancien emploi me déplaçait/m'a déçu

Travail plus enrichissant/stimulant

Pour accompagner mon époux/épouse

Autre (VEUILLEZ PRÉCISER:)

30. Si vous avez un emploi actuellement, veuillez indiquer votre salaire actuel approximatif. (NE COCHER QU'UNE SEULE CASE)

Pas d'emploi actuellement

Moins de \$6,000 par année

\$ 6,000 à \$ 7,999 par année

\$ 8,000 à \$ 9,999 par année

\$10,000 à \$11,999 par année

\$12,000 à \$13,999 par année

\$14,000 à \$15,999 par année

\$16,000 à \$17,999 par année

\$18,000 à \$19,999 par année

\$20,000 à \$21,999 par année

\$22,000 à \$23,999 par année

\$24,000 à \$25,999 par année

\$26,000 à \$27,999 par année

\$28,000 à \$29,999 par année

\$30,000 à \$34,999 par année

\$35,000 à \$39,999 par année

\$40,000 ou plus par année

31. Dans quelle mesure êtes-vous (ou étiez-vous) satisfait de votre dernier emploi en ce qui concerne les aspects suivants? (VEUILLEZ NE COCHER QU'UNE SEULE CASE POUR CHAQUE ASPECT)

TRES SATISFAIT

ASSEZ SATISFAIT

PAS TRES SATISFAIT

INSATISFAIT

a) salaire

b) possibilités d'avancement professionnel

c) possibilités de prendre l'initiative

32. Veuillez indiquer dans quelle mesure vous êtes d'accord ou non avec les affirmations suivantes, pour ce qui est du dernier emploi que vous avez occupé. (VEUILLEZ NE COCHER QU'UNE SEULE CASE POUR CHAQUE PHRASE)

TOUT A FAIT D'ACCORD

D'ACCORD

PAS D'ACCORD

VRAIMENT PAS D'ACCORD

a) L'emploi correspondait à ce à quoi je m'attendais au moment où il a été offert

b) L'emploi se rattache au domaine souhaité

c) Les fonctions de cet emploi auraient pu être remplies sans le grade/diplôme obtenu le plus récemment

33. Dans quelle mesure votre dernier emploi se rapporte-t-il au programme d'études que vous aviez suivi pour votre grade ou diplôme le plus récent?

SE RAPPORTE TRES BIEN

SE RAPPORTE ASSEZ BIEN

NE SE RAPPORTE PAS TRES BIEN

NE SE RAPPORTE PAS DU TOUT

34. Votre employeur avait-il précisé qu'il était essentiel d'avoir un grade ou diplôme pour l'emploi le plus récent que vous avez occupé?

Oui

(VEUILLEZ INDICER LE GRADE/DIPLÔME REQUIS:)

Non

SECTION E

Cette section doit être remplie par tous les répondants

35. A environ combien d'associations, sportives ou autres avez-vous appartenu pendant votre programme d'études post-secondaires?

NOMBRE

36. Quelle description donneriez-vous dans l'ensemble de votre participation à ces activités: aviez-vous... (NE COCHER QU'UNE SEULE CASE)

un rôle d'animateur?

un rôle de participant?

ne s'applique pas

37. Veuillez indiquer ci-dessous tous les emplois que vous avez occupés depuis la fin de vos études secondaires (ou l'équivalent). Veuillez indiquer le temps de travail total (nombre de mois) pour chaque catégorie.

a) Emplois d'été à temps plein (30 heures ou plus par semaine)

b) Emplois à temps partiel (moins de 30 heures par semaine)

c) Emplois à temps plein (exclure les emplois d'été)

d) Stage professionnel, de programme coopératif ou internat

MOIS

MOIS

MOIS

MOIS

38. Veuillez indiquer:

a) Année naissance: 19

b) Sexe: Masculin Féminin

MERCI

APPENDIX D

SAMPLE FORMS FOR
SUMMARIZING
COMPLETED QUESTIONNAIRES

SURVEY OF 1979 GRADUATES

S U M M A R Y

UNIVERSITY:

DATE:

SUPERVISOR:

TOTAL NO. OF
QUESTIONNAIRES:

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B.ED./M.D./D.D.S./L.L.B./L.L.L./O.D./D.V.M./M.DIV. . .	20

FIELD OF STUDY: EDUCATION, PHYSICAL EDUCATION, RECREATION AND LEISURE

SYSTEM CODE	USIS CODE	DESCRIPTION	BACH. 3 YR.	BACH. 4 YR.	MASTER'S	PHD	DIPL./ CERT.	OTHER	TOTAL
1.	1.18	Elementary/Secondary Teacher Training							
2.	1.23	Higher Education, Post-Secondary Teacher Training							
3.	1.36	Kindergarten, Pre-School Teacher Training							
4.	1.38	Non-Teaching Fields							
5.	1.39	Physical Education							

SYSTEM CODE	USIS CODE	DESCRIPTION	BACH. 3 YR.	BACH. 4 YR.	MASTER'S	PHD	DIPL./ CERT.	OTHER	TOTAL
6.	1.40	Kinesiology, Human Kinetics & Kinanthropology							
7.	1.41	Recreation							

FIELD OF STUDY: FINE AND APPLIED ARTS

8.	2.03	Fine Art	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
9.	2.05	Music	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
10.	2.08	Other Performing Arts	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>

FIELD OF STUDIES: HUMANITIES AND RELATED

SYSTEM CODE	USIS CODE	DESCRIPTION	BACH. 3 YR.	BACH. 4 YR.	MASTER'S	PHD	DIPLOMA/ CERT.	OTHER	TOTAL
21.	3.17	Other Mass Communication Studies							
22.	3.22	Philosophy							
23.	3.24	Religious Studies							
24.	3.25	Theological Studies (professional programme, preparation for the ministry)							
25.	3.27	Translation and Interpretation							

